

Lumination™ LED Luminaires

LUS Series with Replaceable Light Engine

Project name _____

Date _____

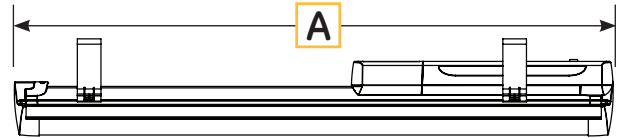
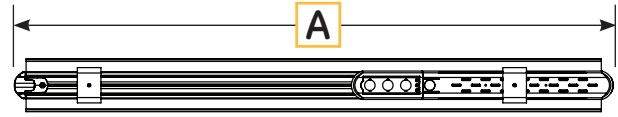
Type _____



Product Description:

GE's Lumination LED fixtures with reveal® TriGain™ technology - LUS Series Suspended fixtures are designed to offer lighting designers enhanced CRI and R9 without sacrificing efficiency. With R9 greater than 90, these fixtures optimally display objects like produce, fabric, skintones and artwork - all with up to 165 LPW, reducing maintenance and operating costs.

Product Dimensions mm (inches):



Standard Fixtures, A:	Emergency Light Option A:
4 ft. - 49 in.	4 ft. - 58 in.
8 ft. - 97 in.	8 ft. - 108 in.

LIS Replaceable Light Engine

Performance Summary:

Distribution Patterns: Aisle (A1), Wide (W1), Very Wide (V1), Wall Wash (WW)

Delivered Lumen Output: 4,200 to 24,000 lm

System Input Power: 30-192 W

Efficacy: 125-165 LPW

Input Voltage: 120-277V, 347V

Standard Dimming Control: 0-10V

CCT: 3500K, 4000K, 5000K

Typical CRI: 83-90

Color Consistency: 4 Step MacAdam Ellipse

Input Frequency (Hz): 50-60Hz

Power Factor: >0.9

Dimensions: 4.4 x 49 x 8 inches (112 x 1256 x 205 mm) 4 ft; (CRI Code=T)

4.4 x 97 x 8 inches (112 x 2473 x 205 mm) 8 ft (CRI Code=8)

Mounting: Suspension (see Accessories Table below)

Weight: <15 lbs

IC rating: Non-IC Rated

Warranty: 5 Years standard

Rated Life: L70 @ 90,000 hours for Trigain only

L85 @ 75,000 hours for Best White

Storage temperature: -40°C to 70°C

Operating temperature: -10° up to 35° C

Removable Light Engine: Standard



Please refer to the DLC QPL website for the latest and most complete information.
www.designlights.org/QPL



a product of ecomagination™

Maximum Run Length per 1 power drop:

Supply Voltage	Lumen Code							
	[42] [84]	[52] [A0] [62] [A2]	[65] [85] [A3] [A7]	[A1] [A2] [B1] [B4]				
120V	192'	160'	80'	60'				
277V or 347V	400'	320'	188'	132"				

Ordering Information:

LUS

A

CS

FAMILY	FIXTURE TYPE	GENERATION	VOLTAGE	NOMINAL LUMENS	DISTRIBUTION	CRI	CCT	CONTROLS	MOUNTING	FINISH	OPTIONS														
LUS	C4* C8* I4 I8	A = Replaceable light engine	0 = 120-277 VAC D = 347VAC* VQ Only	42 = 4200 52 = 5200 62 = 6250 65 = 6500 85 = 8500 A1 = 10,500 A2 = 12,000 8 FT Only 84 = 8400 A0 = 10400 A2 = 12500 A3 = 13000 A7 = 17000 B1 = 21,000 B4 = 24,000	A1 = Aisle W1 = Wide WW** = Wall Wash V1 = Very Wide* *Recommended for retail environment **Only available in I4 & C4 Fixture type	T = TriGain 8 = 83 Note: Trigain only available with: • CCT = [35] [40] only • Lumens: 4 Feet [42] [52] 8 Feet [84] [A0]	30 = 3000K 35 = 3500K 40 = 4000K 50 = 5000K	VQ = 0-10V TQ = ZigBee Enabled** TS = ZigBee Enabled** with Daintree WFA S1 = on/off occ. sensor* S2 = on/off occ. sensor & daylight harvesting sensor (remote 197634)* *Only available with: • Voltage = [0] only • **Lumens: 4 Feet [42] [52] [62] [65] [85] 8 Feet [84] [A0] [A3] [A7]	CS = (See accessories page below for further accessory/mounting options which have to be ordered separately*) *Mounting brackets come included with each fixture.	WHITE = White BLCK = Black SLVR = Silver REDE = Red	BC = Branch Circuit NOTE: Only available with 'C4' & 'C8' fixture type EL = Emergency Light NOTE: Only available for Lumen code 4ft - 42, 52 & 62 • 8ft - 84, A0 & A2 Only available for voltage "0" (120/277) Only available with controls "VQ" Not compatible with option "HE" & "BC" HE = High Efficiency Fixture NOTE: Up to 165 LPW fixture for CRI = 8 and lumen codes 42, 52, 84, and A0 only and voltage [0] only P10 = 10ft Power Cord Blk P20 = 20ft Power Cord Blk PCS = power cord sample with 120Vvac NOTE: Only available with 'I4' & 'I8' fixture type. Not compatible with BC & EL R10 = RELOC 277V 10ft 3C R20 = RELOC 277V 20ft 3C S = Single Pack NOTE: Must be applied for orders of 10pc or less. Multiple 'OPTIONS' choices must be entered in alphabetic order														
					<table border="1"> <thead> <tr> <th>Distribution</th> <th>% Uplight</th> </tr> </thead> <tbody> <tr> <td>A1</td> <td>7 %</td> </tr> <tr> <td>A1 with reflector wings option</td> <td>2 %</td> </tr> <tr> <td>W1 (wide)</td> <td>13 %</td> </tr> <tr> <td>W1 with reflector wings option</td> <td>4 %</td> </tr> <tr> <td>V1 (very wide)</td> <td>18 %</td> </tr> <tr> <td>V1 with reflector wings option</td> <td>6 %</td> </tr> </tbody> </table>		Distribution	% Uplight	A1	7 %	A1 with reflector wings option	2 %	W1 (wide)	13 %	W1 with reflector wings option	4 %	V1 (very wide)	18 %	V1 with reflector wings option	6 %					
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*See Page 2 for tables

current
powered by GE



Ordering Information: Nominal Lumens



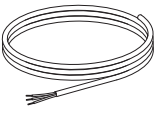
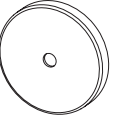




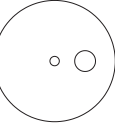
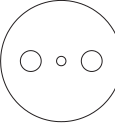




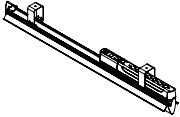
Length	Lumen Code	CRI Code	CCT Code	Lumens	Power	LPW
4FT Only	42	T	40	4200	32	131
	52	T	40	5200	39	133
8FT Only	84	T	40	8400	66	127
	A0	T	40	10400	80	130

Note:
 • Reveal® TriGain™
 • Lumen Multiplier = 1.00 for CCT = 3500K
 • CRI = 90+

Length	Lumen Code	CRI Code	CCT Code	Lumens	Power	LPW
4FT Only	42	8	40	4200	30	140
	52	8	40	5200	37	140
	62	8	40	6250	43.7	143
	65	8	40	6500	43.1	151
	85	8	40	8500	56.9	149
	A1	8	40	11000	80.0	138
8FT Only	A2	8	40	12000	87.8	137
	84	8	40	8400	57.8	145
	A0	8	40	10400	72.5	143
	A2	8	40	12500	90.4	138
	A3	8	40	13000	85.4	152
	A7	8	40	17000	112.6	151
	B1	8	40	21000	146.2	144
	B4	8	40	24000	170.7	141

Note:
 • Lumen Multiplier = 0.97 for CCT = 3500K
 • Lumen Multiplier = 1.02 for CCT = 5000K
 • CRI = 83
 • Wall Wash Lumen multiplier = 0.9

Accessories: LUS Series

Accessories		Product code
Sample Fixture - LUSI4A042V1T40VQCSWHTESPCS		93073940
P10 & P20 Power Cord Kit With Dimming Leads - Options		93083389 POWER CORD KIT - P10 Blk Option: 14AWG-5COND,10FT,BLK 93083390 POWER CORD KIT - P10 Wht Option: 14AWG-5COND,10FT,WHT 93083391 POWER CORD KIT - P20 Blk Option: 14AWG-5COND,20FT,BLK 93083392 POWER CORD KIT - P20 Wht Option: 14AWG-5COND,20FT,WHT
Suspended Kits - Option 1 Set of 10' mounting cables 		93035285
Suspended Kits - Option 2 Set of 10' mounting cables  Power feed cable (6.75 ft.)  #14-4 gauge; includes black, white, green and red (for additional circuits)		93035306 ¹ 1. Dimming leads not included; #14-4 gauge; includes black, white, green and red (for additional circuits)
Suspended Kits - Option 3    Upper Mounting Kit (x2)		93026986
Suspended Kits - Option 4 Set of 10' mounting cables  Power feed cable (6.75 ft.)     Canopy Kit (x1)    Upper Mounting Kit (x2)		93035307 ¹ 1. Dimming leads not included; #14-4 gauge; includes black, white, green and red (for additional circuits)
Starter Kit (1 row)	Comes with: 2 x end cap 1 x wire harness 1 x Knock out plate 1 x Additional suspension bracket	White 93046694 (kit quantity = 1) Silver 93046700 (kit quantity = 1) Black 93046697 (kit quantity = 1) Red 93046703 (kit quantity = 1)
Starter Kit (10 row)	Comes with: 20 x end cap 10 x wire harness 10 x Knock out plate 10 x Additional suspension bracket	White 93046696 (kit quantity = 10) Silver 93046702 (kit quantity = 10) Black 93046699 (kit quantity = 10) Red 93046705 (kit quantity = 10)
Reflector Wings	 Wings accommodate both sides of the fixtures	SKU# 93046683 - 4 ft. Wing pack of 1 SKU# 930466835 - 4 ft. Wing pack of 10 SKU# 93046680 - 8 ft. Wing pack of 1 SKU# 93046682 - 8 ft. Wing pack of 10

Photometric Data: LUSI8 Series

LUS-X8-A-X-84-A1-T-40-VQ-XX-WHTE

A1-LUMINANCE DATA (CD/SQ.M)			
Angle	0°	45°	90°
45°	12534	7455	6798
55°	5703	4605	4872
65°	2005	3471	3474
75°	494	2818	2327
85°	83	2101	1547

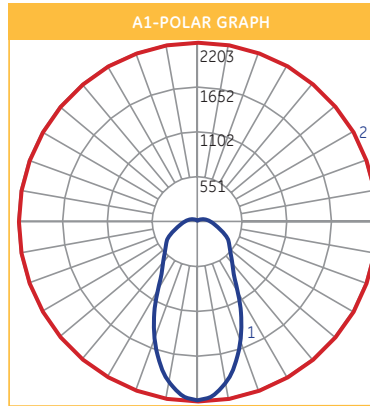
A1-ZONAL LUMEN SUMMARY B	
Zone	Lumens
0-10	204.81
20-10	548.6
20-30	713.08
30-40	672.58
40-50	554.13
50-60	433.62
60-70	335.33
70-80	251.01
80-90	178.7
90-100	119.1
100-110	79.61
110-120	53.98
120-130	33.22
130-140	16.41
140-150	5.99
150-160	1.51
160-170	0.28
170-180	0.05

A1-COEFFICIENTS OF UTILIZATION-ZONAL CAVITY METHOD																			
RC	80%				70%				50%				30%				10%		0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	93	
1	107	102	98	94	103	99	95	92	94	90	88	88	86	84	84	82	80	77	
2	98	90	84	78	95	88	82	77	83	78	74	79	75	71	75	71	68	66	
3	90	80	73	67	87	78	71	66	74	68	64	71	66	62	67	63	60	57	
4	84	72	64	58	81	71	63	57	67	61	56	64	59	54	61	56	53	50	
5	77	66	57	51	75	64	56	50	61	54	49	58	53	48	56	51	47	45	
6	72	60	51	45	70	58	51	45	56	49	44	54	48	43	51	46	42	40	
7	67	55	47	41	65	54	46	41	52	45	40	49	43	39	48	42	38	36	
8	63	51	43	37	61	50	42	37	48	41	36	46	40	36	44	39	35	33	
9	59	47	39	34	58	46	39	34	44	38	33	43	37	33	41	36	32	30	
10	56	44	36	31	54	43	36	31	41	35	31	40	34	30	39	33	30	28	

NOTE: Floor Cavity Reflectance : 20%

A1-ZONAL LUMEN SUMMARY A			
Zone	Lumens	% of Lamp	% of Fixture
0-30	1466.48	N.A.	34.9
0-40	2139.06	N.A.	50.9
0-60	3126.81	N.A.	74.4
0-90	3891.84	N.A.	92.6
90-120	252.68	N.A.	6
90-130	285.9	N.A.	6.8
90-150	308.29	N.A.	7.3
90-180	310.13	N.A.	7.4
0-180	4201.98	N.A.	100

Total Luminaire Efficiency = N.A.%



LUS-X8-A-X-84-W1-T-40-VQ-XX-WHTE

W1-LUMINANCE DATA (CD/SQ.M)			
Angle	0°	45°	90°
45°	9423	6110	5918
55°	6789	5017	4955
65°	4263	4236	4201
75°	2412	3777	3566
85°	705	3493	3181

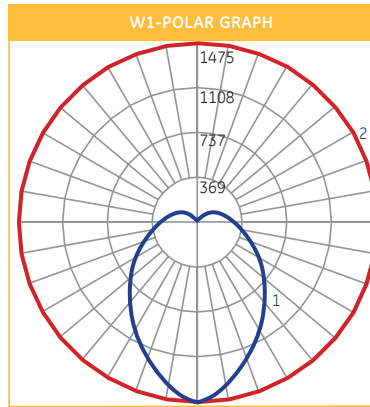
W1-ZONAL LUMEN SUMMARY B	
Zone	Lumens
0-10	136.28
10-20	369.66
20-30	523.74
30-40	584.29
40-50	562.97
50-60	494.59
60-70	409.82
70-80	326.15
80-90	252.39
90-100	192.64
100-110	142.74
110-120	96.04
120-130	59.04
130-140	32.13
140-150	13.59
150-160	4.2
160-170	1.01
170-180	0.2

W1-COEFFICIENTS OF UTILIZATION-ZONAL CAVITY METHOD																			
RC	80%				70%				50%				30%				10%		0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87	
1	104	99	94	89	100	95	91	87	88	85	82	82	79	77	77	74	72	69	
2	94	86	78	72	91	83	76	70	77	72	67	72	67	63	67	63	60	57	
3	86	75	67	60	82	73	65	59	68	61	56	63	58	53	59	55	51	48	
4	79	67	58	51	76	65	56	50	60	53	48	57	51	46	53	48	44	41	
5	73	60	51	44	70	58	50	43	54	47	42	51	45	40	48	43	38	36	
6	67	54	45	39	64	52	44	38	49	42	37	46	40	35	44	38	34	32	
7	62	49	40	34	60	48	39	34	45	38	33	42	36	31	40	35	30	28	
8	58	45	36	31	56	44	36	30	41	34	29	39	33	28	37	31	27	25	
9	54	41	33	28	52	40	32	27	38	31	26	36	30	26	34	29	25	23	
10	51	38	30	25	49	37	30	25	35	29	24	34	28	23	32	27	23	21	

NOTE: Floor Cavity Reflectance : 20%

W1-ZONAL LUMEN SUMMARY A			
Zone	Lumens	% of Lamp	% of Fixture
0-30	1029.68	N.A.	24.5
0-40	1613.98	N.A.	38.4
0-60	2671.53	N.A.	63.6
0-90	3659.88	N.A.	87.1
90-120	431.42	N.A.	10.3
90-130	490.46	N.A.	11.7
90-150	536.18	N.A.	12.8
90-180	541.59	N.A.	12.9
0-180	4201.47	N.A.	100

Total Luminaire Efficiency = N.A.%



Photometric Data: LUSI8 Series

LUS-X8-A-X-84-V1-T-40-VQ-XX-WHTE

V1-LUMINANCE DATA (CD/SQ.M)			
Angle	0°	45°	90°
45°	6030	5726	6556
55°	5186	5444	6314
65°	4156	5129	5910
75°	2833	4832	5432
85°	1188	4624	5018

V1-ZONAL LUMEN SUMMARY B

Zone	Lumens
0-10	75.88
20-10	220.01
20-30	345.05
30-40	446.03
40-50	511.44
50-60	530.14
60-70	501.8
70-80	437.37
80-90	355.99
90-100	274.84
100-110	201.58
110-120	138.56
120-130	86.85
130-140	47.22
140-150	20.07
150-160	5.91
160-170	1.36
170-180	0.25

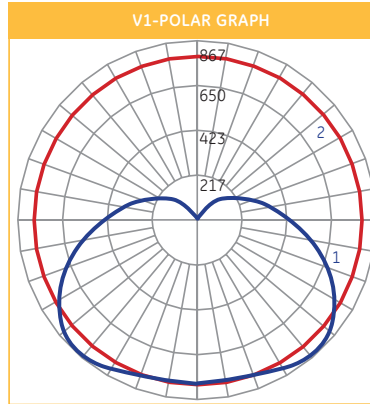
V1-COEFFICIENTS OF UTILIZATION-ZONAL CAVITY METHOD																			
RC	80%				70%				50%				30%				10%		0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	115	115	115	115	110	110	110	110	101	101	101	93	93	93	85	85	85	82	
1	101	95	89	84	96	90	85	81	83	79	75	76	72	69	69	66	64	60	
2	90	80	72	65	86	77	69	63	70	64	59	64	59	55	58	54	51	47	
3	81	69	60	53	77	66	58	51	61	54	48	55	50	45	50	46	42	38	
4	74	61	51	44	70	58	49	42	53	46	40	49	42	37	44	39	35	32	
5	68	54	44	37	64	51	43	36	47	40	34	43	37	32	40	34	30	27	
6	62	48	38	32	59	46	37	31	42	35	29	39	32	27	36	30	26	23	
7	57	43	34	28	55	42	33	27	38	31	25	35	29	24	32	27	22	20	
8	53	39	30	24	51	38	29	24	35	28	22	32	26	21	30	24	20	18	
9	50	36	27	22	47	34	26	21	32	25	20	30	23	19	27	22	18	16	
10	46	33	25	19	44	32	24	19	29	23	18	27	21	17	25	20	16	14	

NOTE: Floor Cavity Reflectance : 20%

V1-ZONAL LUMEN SUMMARY A

Zone	Lumens	% of Lamp	% of Fixture
0-30	640.95	N.A.	15.3
0-40	1086.98	N.A.	25.9
0-60	2128.56	N.A.	50.7
0-90	3423.72	N.A.	81.5
90-120	614.98	N.A.	14.6
90-130	701.83	N.A.	16.7
90-150	769.12	N.A.	18.3
90-180	776.64	N.A.	18.5
0-180	4200.36	N.A.	100

Total Luminaire Efficiency = N.A.%



LUS-X8-A-X-84-WW-T-40-VQ-XX-WHTE

WW-LUMINANCE DATA (CD/SQ.M)			
Angle	0°	45°	90°
45°	8973	8993	7417
55°	7351	7336	5744
65°	6061	6021	4113
75°	5315	5187	2544
85°	4811	4812	698

WW-ZONAL LUMEN SUMMARY B

Zone	Lumens
0-10	108.61
10-20	314.58
20-30	477.04
30-40	556.36
40-50	552.14
50-60	490.57
60-70	403.64
70-80	318.16
80-90	243.64
90-100	184.01
100-110	135.55
110-120	95.22
120-130	62.01
130-140	35.34
140-150	16.42
150-160	5.49
160-170	1.10
170-180	0.14

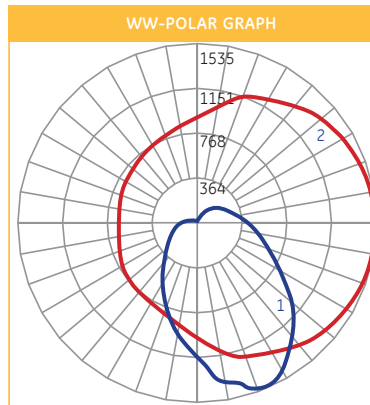
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RC	80%				70%				50%				30%				10%		0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	116	116	116	116	112	112	112	112	104	104	104	96	96	96	90	90	90	87	
1	104	98	93	89	100	95	90	86	88	84	81	82	79	76	76	74	72	68	
2	94	85	78	71	90	82	75	70	76	71	66	71	66	62	66	62	59	56	
3	86	74	66	59	82	72	64	58	67	60	55	62	57	52	58	54	50	47	
4	78	66	57	50	75	64	55	49	59	52	47	55	50	45	52	47	43	40	
5	72	59	50	43	69	57	48	42	53	46	40	50	44	39	47	41	37	35	
6	66	53	44	37	64	51	43	37	48	41	35	45	39	34	42	37	33	30	
7	62	48	39	33	59	47	38	32	44	37	31	41	35	30	39	33	29	27	
8	57	44	35	29	55	42	34	29	40	33	28	38	32	27	36	30	26	24	
9	54	40	32	26	51	39	31	26	37	30	25	35	29	24	33	28	24	22	
10	50	37	29	24	48	36	29	24	34	27	23	32	26	22	31	25	21	20	

NOTE: Floor Cavity Reflectance : 20%

WW-ZONAL LUMEN SUMMARY A

Zone	Lumens	% of Lamp	% of Fixture
0-20	423.19	N.A.	10.60
0-30	900.24	N.A.	22.50
0-40	1456.59	N.A.	36.40
0-60	2499.29	N.A.	62.50
0-80	3221.09	N.A.	80.50
0-90	3464.73	N.A.	86.60
10-90	3356.12	N.A.	83.90
20-40	1033.4	N.A.	25.80
20-50	1585.54	N.A.	39.60
40-70	1446.34	N.A.	36.20
60-80	721.80	N.A.	18.00
70-80	318.16	N.A.	8.00
80-90	243.64	N.A.	6.10
90-110	319.56	N.A.	8.00
90-120	414.78	N.A.	10.40
90-130	476.79	N.A.	11.90
90-150	528.55	N.A.	13.20
90-180	535.27	N.A.	13.40
110-180	215.71	N.A.	5.40
0-180	4000.00	N.A.	100.00

Total Luminaire Efficiency = N.A.%



Product Specifications:

Construction:

- Fully recyclable heatsink
- IP Rating: IP20
- Impact Resistance: IK=2

Electrical System:

- Class 2, (4Ft (4200 to 6250 lumens) and 8 FT (8400 to 12500 lumens) replaceable, high efficiency LED driver rated for 50,000 hours when used within operating conditions
- Class 1 driver for all other lumens package
- Audible Noise – Per 29CFR 1910 sub part G: <24 dba (1 foot)
- THD: <20% except for the following: fixture type: [C4][I4] & option [HE] @ 277VAC only.
- PF > 0.9 except for the following conditions:
- Transient Protection: 100 kHz ring wave, 2.5 kV level
- Environmental Testing: High Temperature High Humidity: 60°C / 90% (non-condensing)
- Electronic Vibration Testing: Multi Axis, Random Vibration Profile: 2-2000 Hz, 5Gs on electronics
- Compliant with the material restriction requirements of RoHS

Installation:

- When ordering LUS Series LED Luminaires, 2 mounting brackets are included for each Independent fixture, and 1 bracket is included for each Continuous run fixture.
- Additional mounting brackets can be ordered if needed, depending upon mounting and spacing of application.

For more information and access to all of our resources, including our design tool visit: www.gelighting.com

HE Option Table:

Lumen Code	CRI Code	CCT Code	Lumens	Power	LPW	HE option ONLY Lumen multiplier: CCT = 3500K -> 0.97 CCT = 5000K -> 1.02 Not available in [T] CRI Only available for following lumen code: [42], [52], [84] and [A0]
42	8	40	4200	27	156	
52	8	40	5200	35	149	
84	8	40	8400	52	162	
A0	8	40	10400	66	158	

