

Report No.: ALCANO - 341100 - 240W

Test Time: 2024-12-09 11:29

Luminaire Property

Luminaire Manufacturer: BBT-LIGHTING
Luminaire Category: LED STREET LIGHT
Lamp Catalog: LED
Number of Lamps: 320
Voltage: 218.9 V
Power: 240.10 W

Luminaire Description: ALCANO - 341100 - 240W
Lamp Description: 3030
Lumens per Lamp: 112
Current: 1.130 A
Power Factor: 0.990

Photometric Results

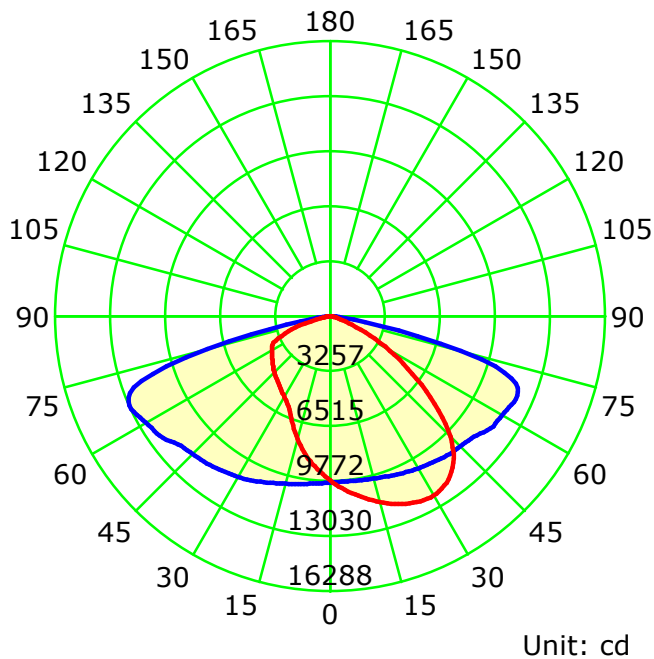
IES Classification: Type II
Total Rated Lamp Lumens: 35840.0 lm
Efficiency: 100.79%
Upward Ratio: 0.00%
Central Intensity: 9854.92 cd
Pos of Max. Intensity: H180 V66

Longitudinal Classification: Short
Measurement Flux: 36124.7 lm
Downward Ratio: 100.79%
Luminaire Efficacy Rating (LER): 150.51
Max. Intensity: 13030.51 cd

Picture Of Luminaire



Luminous Intensity Distribution Curve

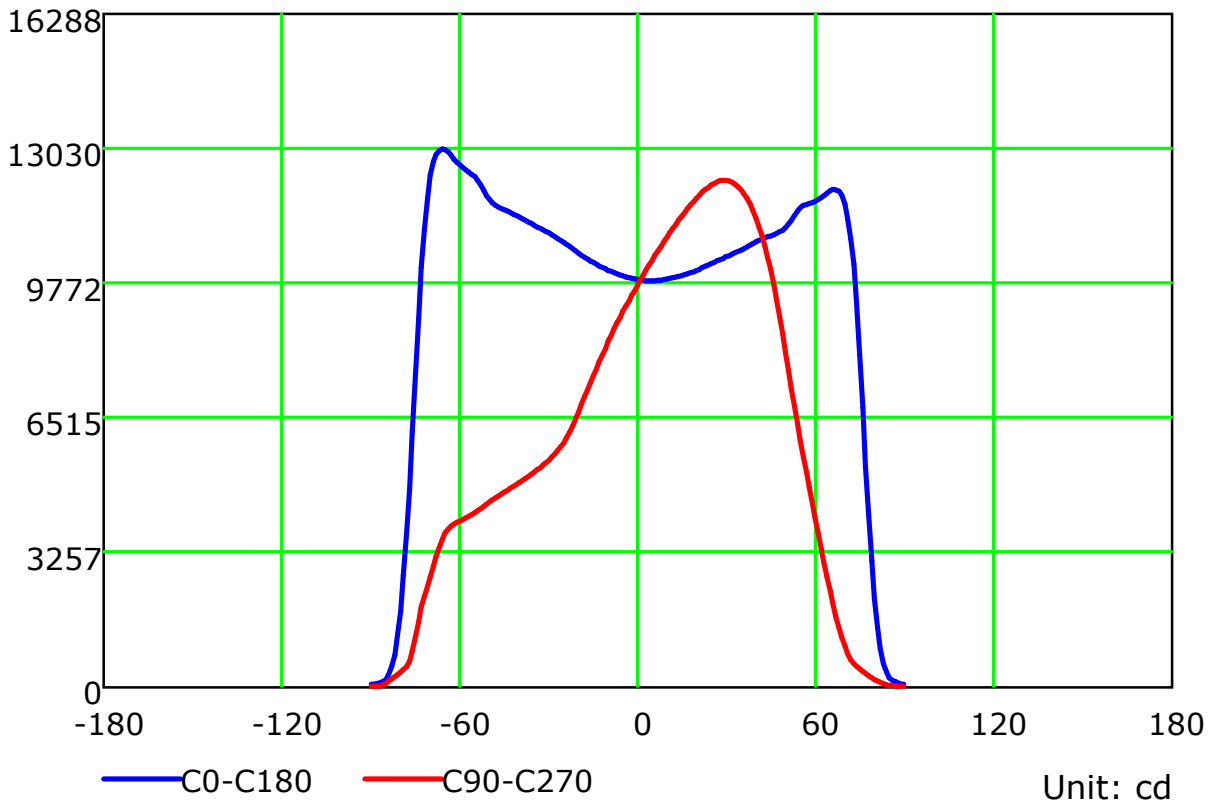
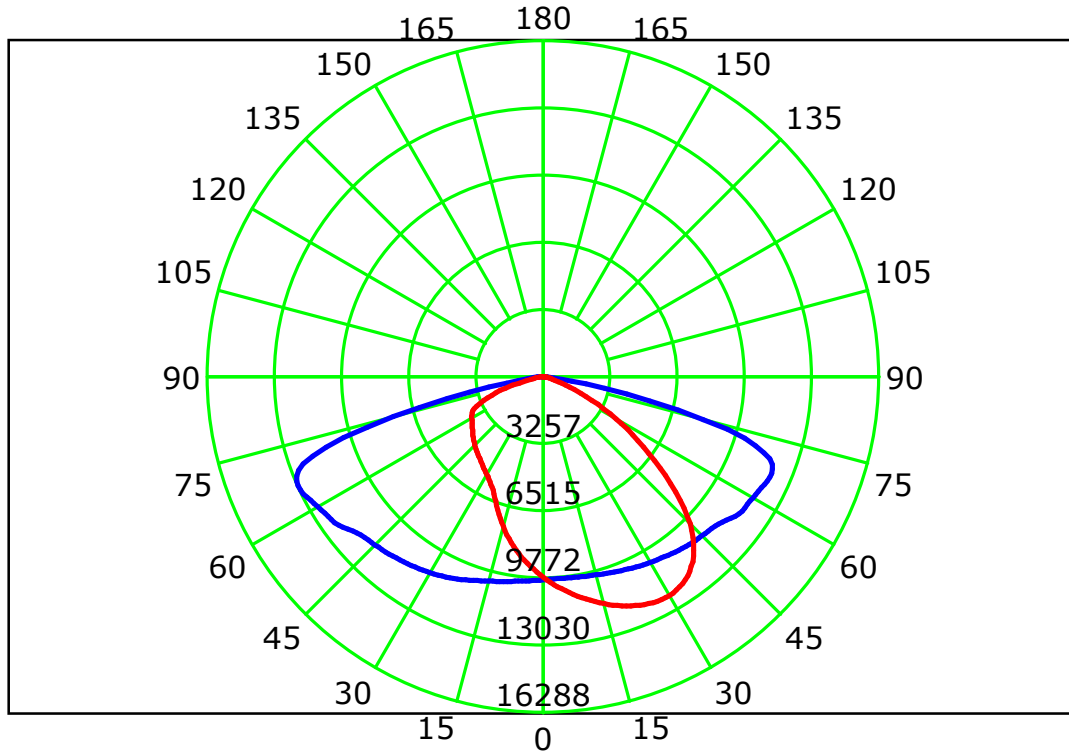


— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator: ADRIANO

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 8.730 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve



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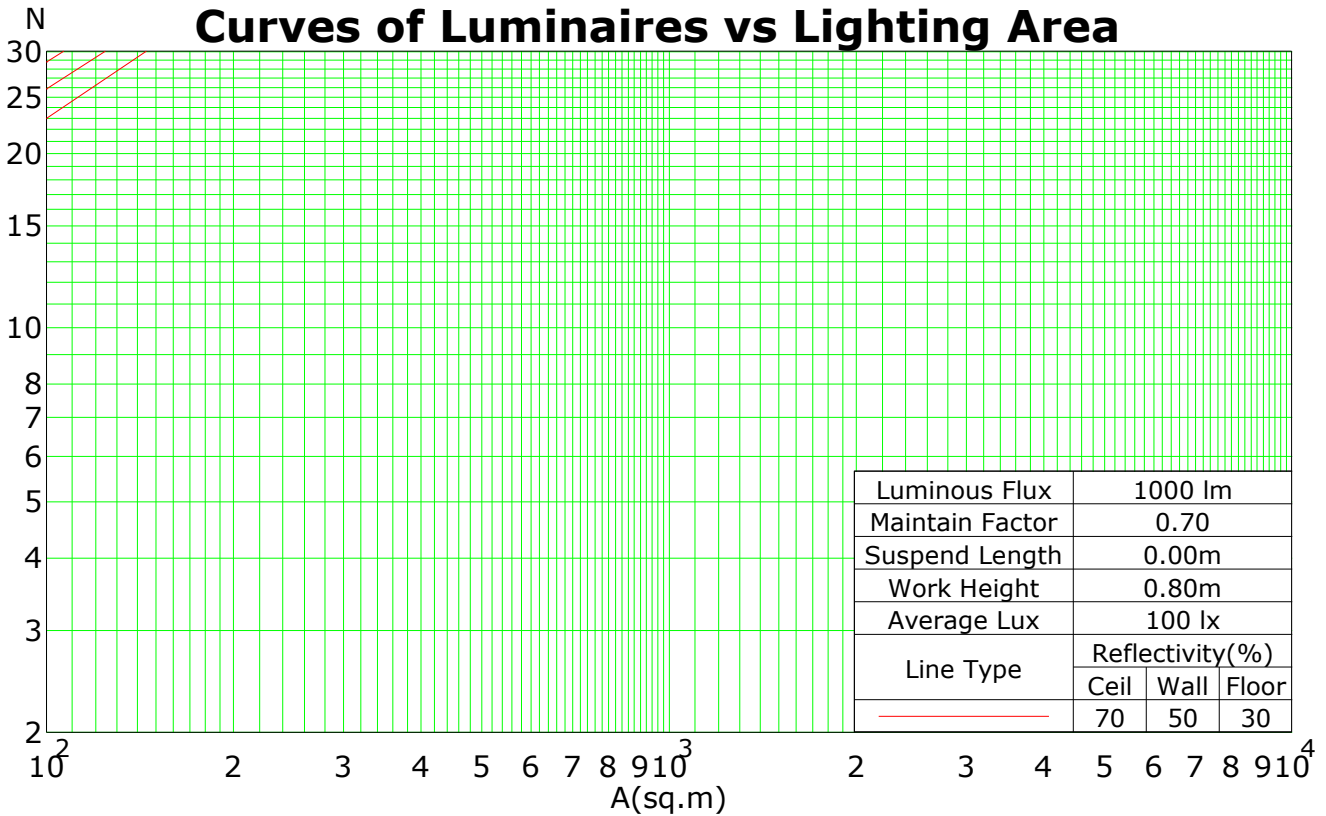
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Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	120	120	120	120	117	117	117	117	112	112	112	107	107	107	103	103	103	101
1	110	105	100	97	107	102	99	95	98	95	92	94	92	89	91	88	86	84
2	99	91	83	77	96	89	82	77	85	79	75	82	77	73	79	75	71	69
3	90	79	70	63	87	77	69	63	74	67	62	71	65	61	69	64	59	57
4	82	69	60	53	79	68	59	52	65	58	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	69	55	45	38	67	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	48	40	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	29	43	35	29	41	34	29	40	34	29	27
9	55	41	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24
10	51	37	29	24	50	37	29	24	36	29	23	35	28	23	34	28	23	21

Spacing Criteria (0-180): 1.69
 Spacing Criteria (90-270): 1.37
 Spacing Criteria (Diagonal): 1.56

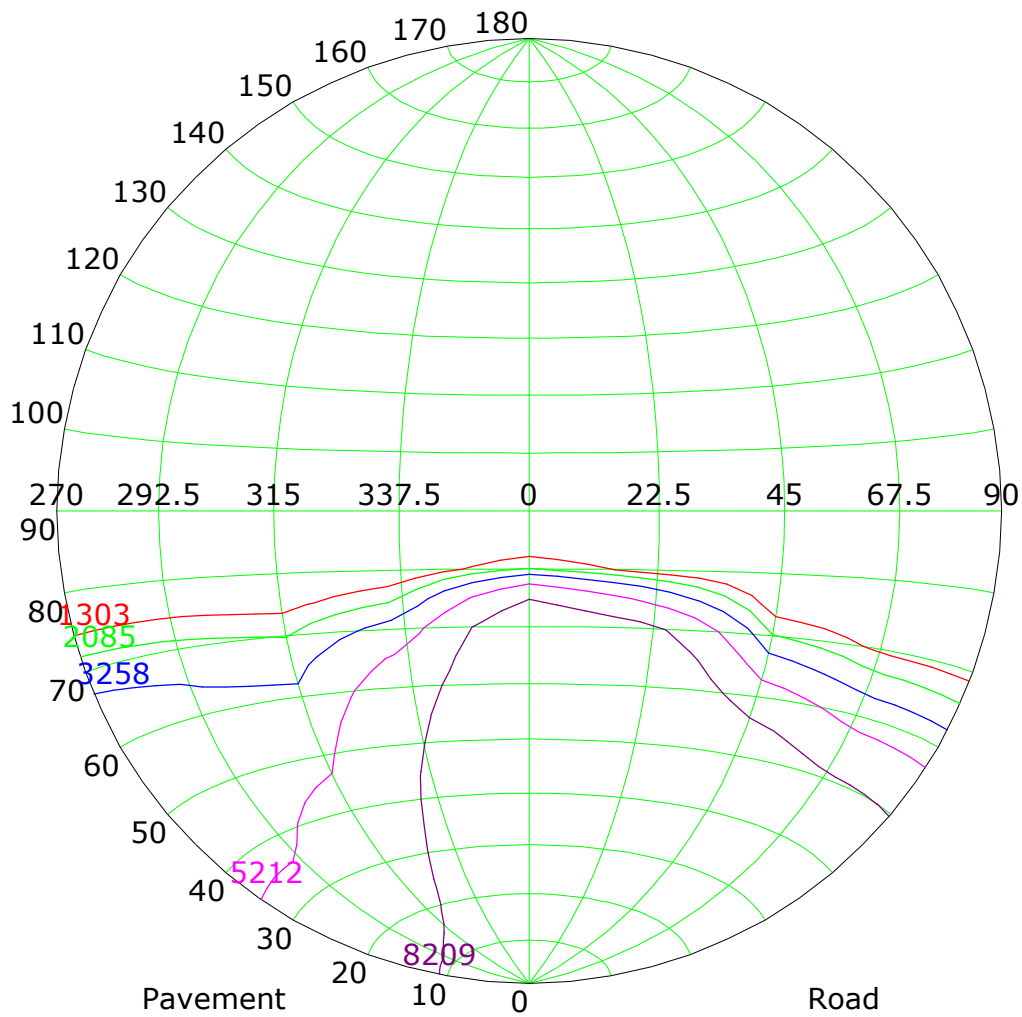
Curves of Luminaires vs Lighting Area



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Isocandela (sphere)



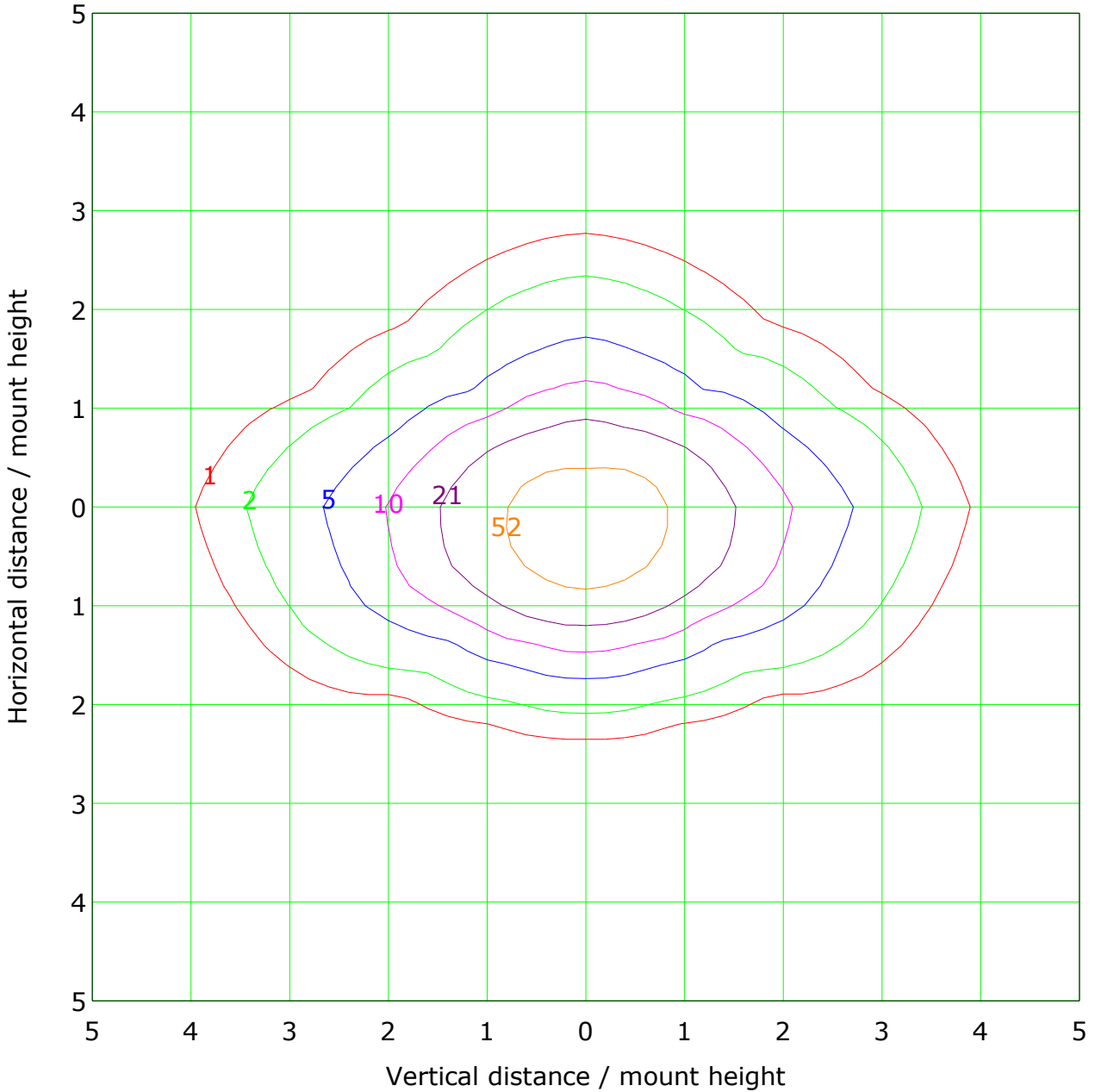
Imax (100%): 13031 cd

- (10%): 1303 cd
 - (25%): 3258 cd
 - (63%): 8209 cd
- (16%): 2085 cd
 - (40%): 5212 cd
 - (100%): 13031 cd

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IsoLux Plot



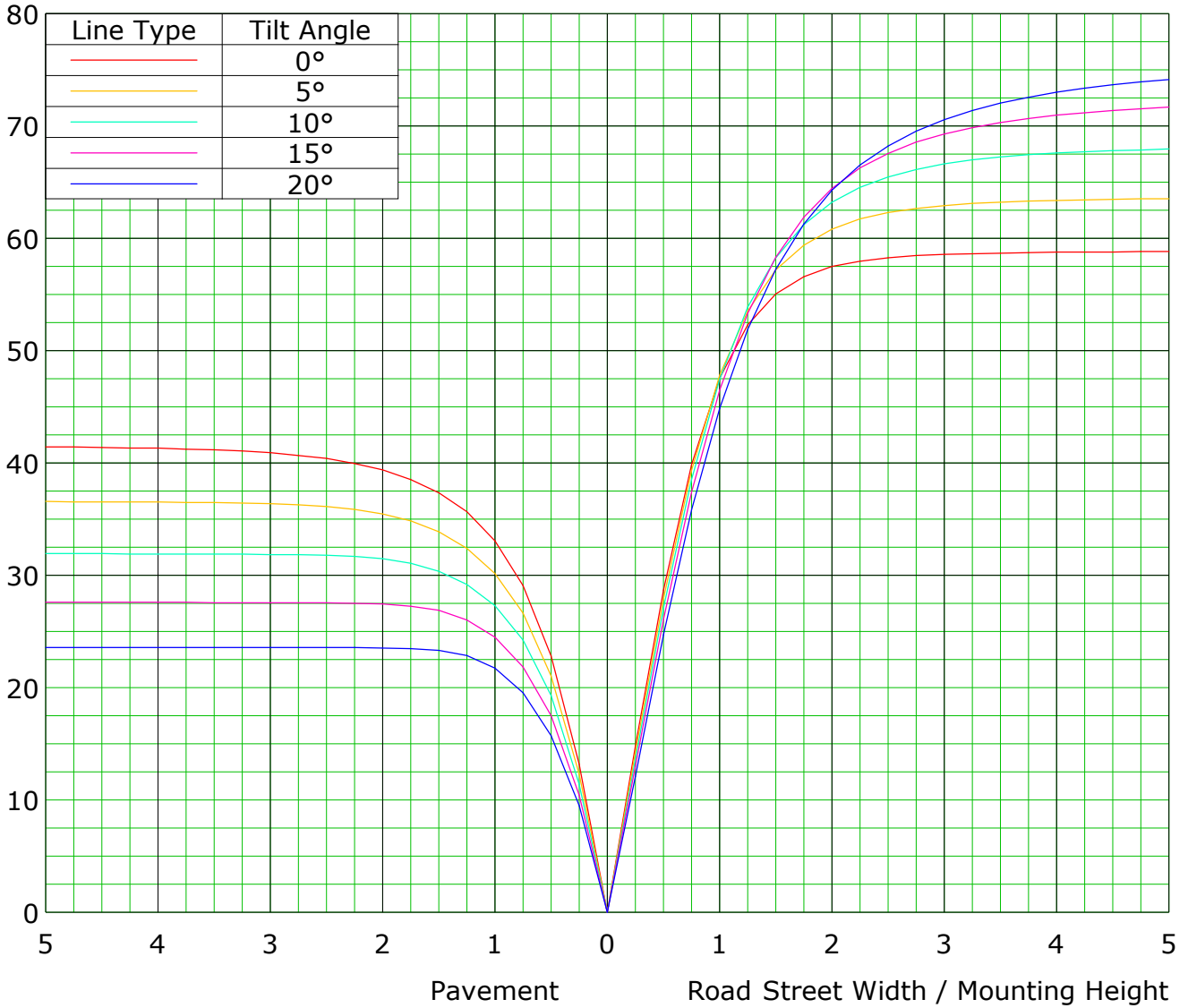
Mounting Height: 10.0m		Max Lux(100%): 104.0 lx
— (1%):	1.0 lx	— (2%): 2.1 lx
— (5%):	5.2 lx	— (10%): 10.4 lx
— (20%):	20.8 lx	— (50%): 52.0 lx
— (100%):	104.0 lx	

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Roadway CU Curve

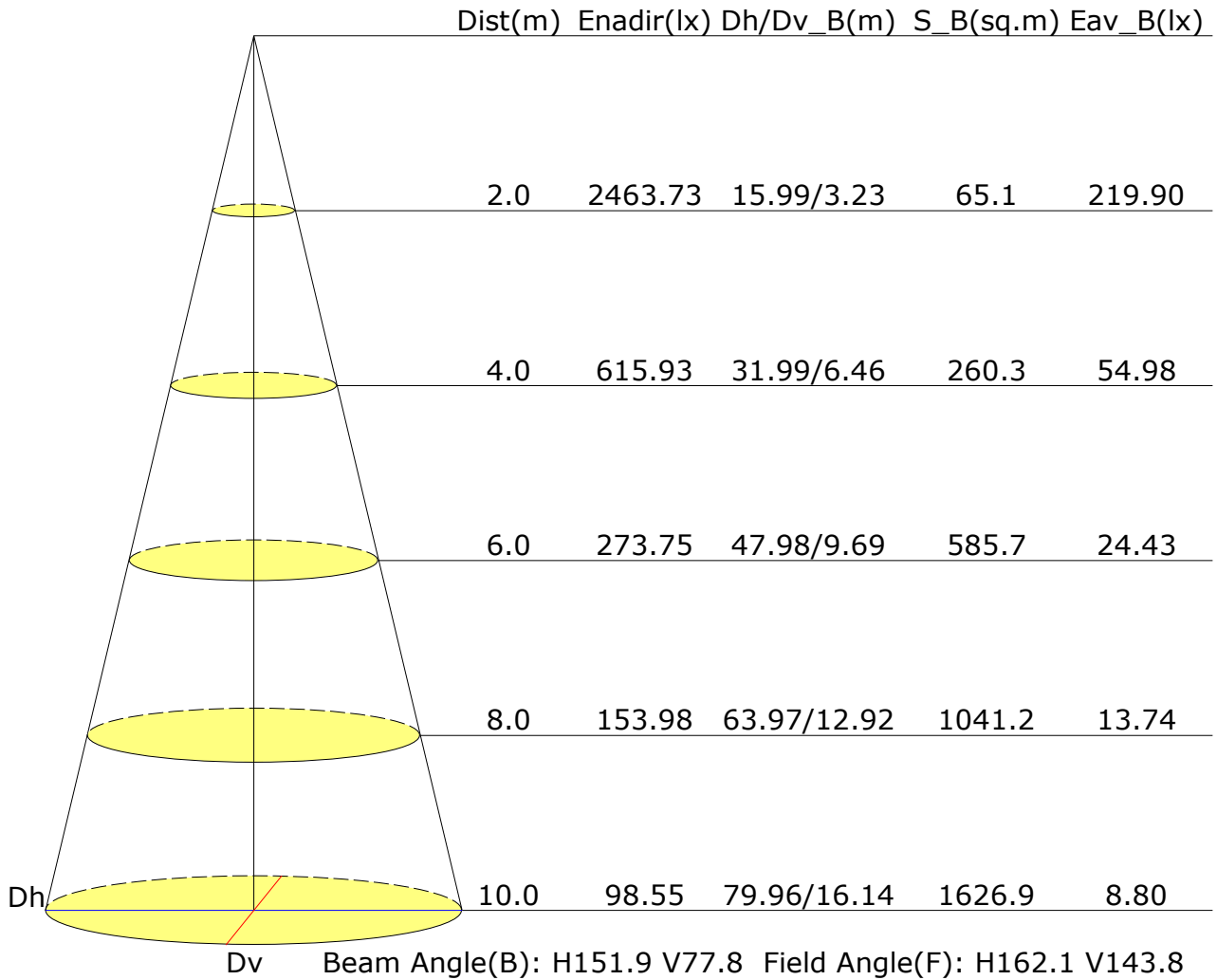
Efficiency(%)



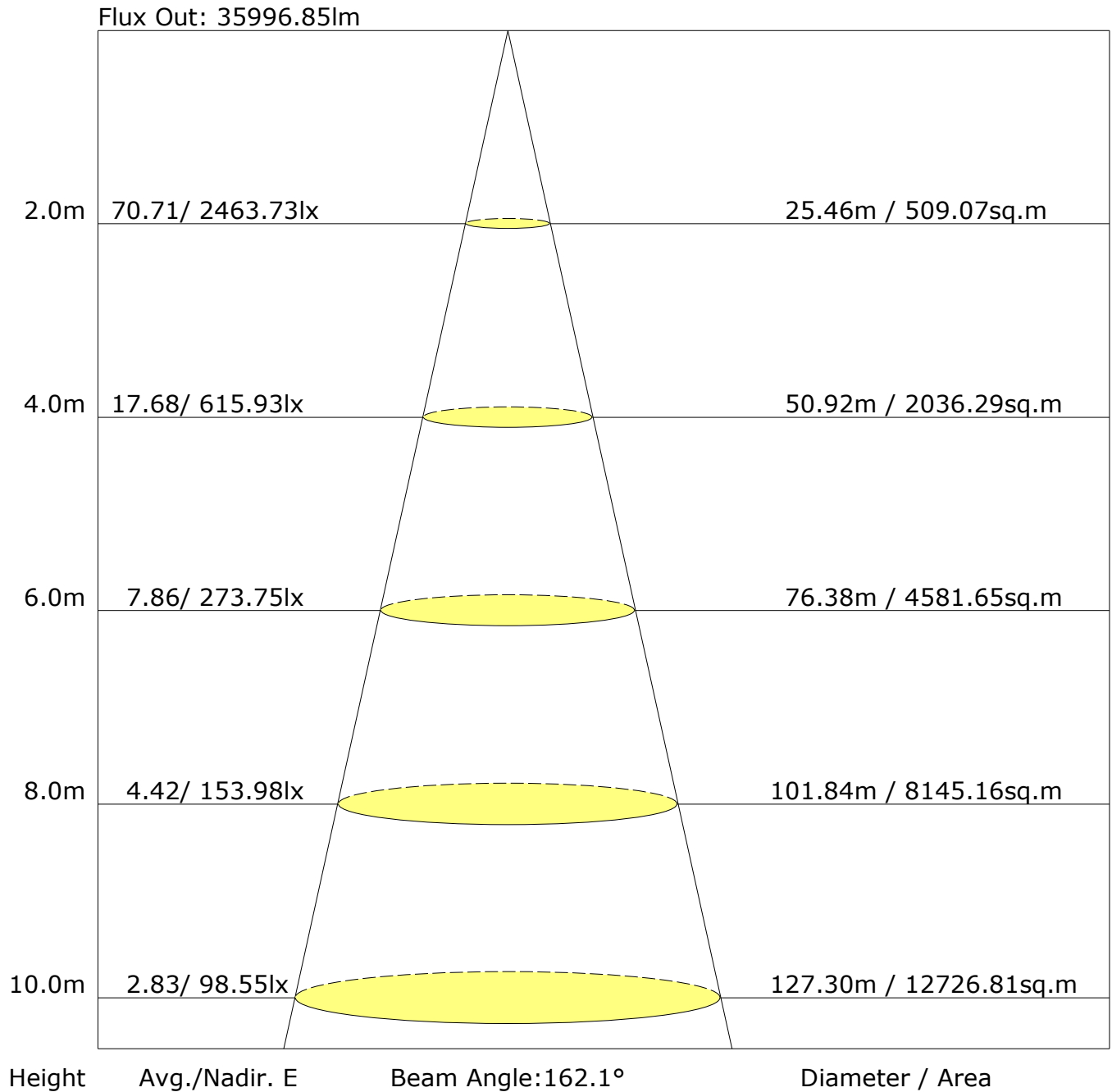
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Illuminance at a Distance



The Average Illuminance Effective Figure

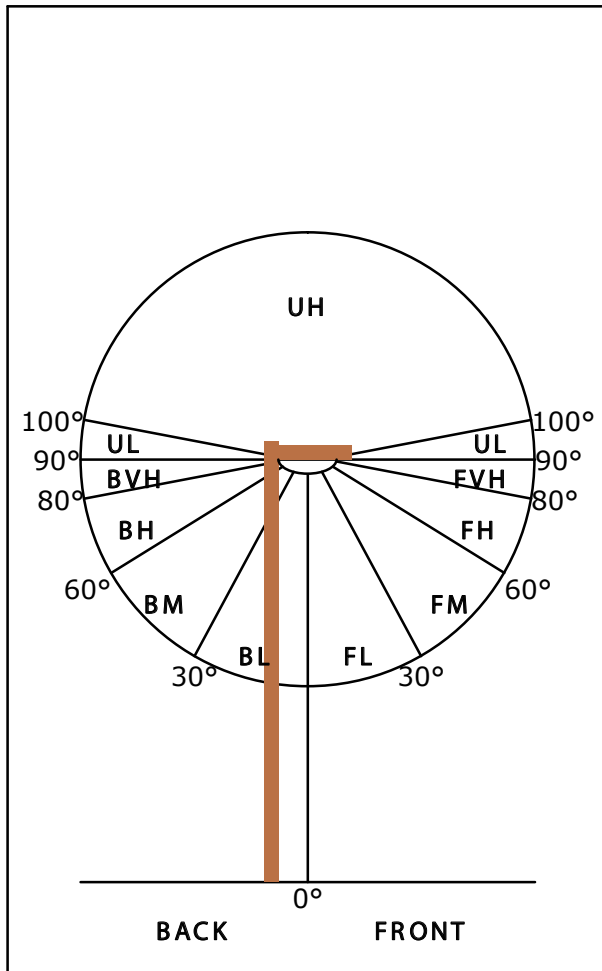


Adriano

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FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM



ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	21213	59.2
FL (0°-30°)	4724	13.2
FM (30°-60°)	12016	33.5
FH (60°-80°)	4391	12.3
FVH (80°-90°)	82	0.2
BACK LIGHT	14912	41.6
BL (0°-30°)	3471	9.7
BM (30°-60°)	7651	21.3
BH (60°-80°)	3684	10.3
BVH (80°-90°)	106	0.3
UP LIGHT	0	0.0
UL (90°-100°)	0	0.0
UH (100°-180°)	0	0.0
TRAPPED LIGHT	NA	NA

BUG (Backlight, Uplight, Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I, II, III, IV)	B4 U2 G4
Quadrilateral Symmetrical Luminaire Types (Type V, Area Light)	B4 U2 G2

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Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	9749.7	9.3	9.3	0.03	0.03
1.0-2.0	9749.6	28.0	37.3	0.08	0.10
2.0-3.0	9750.7	46.6	84.0	0.13	0.23
3.0-4.0	9752.9	65.3	149.3	0.18	0.42
4.0-5.0	9755.6	83.9	233.2	0.23	0.65
5.0-6.0	9758.2	102.6	335.8	0.29	0.94
6.0-7.0	9760.7	121.2	456.9	0.34	1.27
7.0-8.0	9762.7	139.7	596.7	0.39	1.66
8.0-9.0	9763.1	158.2	754.9	0.44	2.11
9.0-10.0	9763.1	176.7	931.6	0.49	2.60
10.0-11.0	9762.5	195.1	1126.7	0.54	3.14
11.0-12.0	9761.4	213.4	1340.1	0.60	3.74
12.0-13.0	9760.6	231.7	1571.8	0.65	4.39
13.0-14.0	9759.8	249.8	1821.6	0.70	5.08
14.0-15.0	9758.3	267.9	2089.6	0.75	5.83
15.0-16.0	9755.5	285.9	2375.5	0.80	6.63
16.0-17.0	9753.5	303.8	2679.2	0.85	7.48
17.0-18.0	9751.9	321.6	3000.8	0.90	8.37
18.0-19.0	9748.8	339.2	3340.0	0.95	9.32
19.0-20.0	9744.9	356.7	3696.7	1.00	10.31
20.0-21.0	9740.8	374.1	4070.8	1.04	11.36
21.0-22.0	9737.4	391.4	4462.2	1.09	12.45
22.0-23.0	9734.3	408.5	4870.7	1.14	13.59
23.0-24.0	9729.9	425.5	5296.2	1.19	14.78
24.0-25.0	9726.1	442.3	5738.5	1.23	16.01
25.0-26.0	9723.2	459.0	6197.5	1.28	17.29
26.0-27.0	9718.6	475.5	6673.0	1.33	18.62
27.0-28.0	9712.4	491.8	7164.8	1.37	19.99
28.0-29.0	9703.3	507.7	7672.5	1.42	21.41
29.0-30.0	9691.9	523.4	8195.9	1.46	22.87
30.0-31.0	9678.0	538.7	8734.6	1.50	24.37
31.0-32.0	9659.8	553.5	9288.0	1.54	25.92
32.0-33.0	9638.6	567.9	9856.0	1.58	27.50
33.0-34.0	9615.0	582.0	10437.9	1.62	29.12
34.0-35.0	9586.5	595.4	11033.4	1.66	30.79
35.0-36.0	9553.8	608.4	11641.7	1.70	32.48

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Zonal Lumen (Continue 1)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	9516.8	620.8	12262.5	1.73	34.21
37.0-38.0	9473.7	632.4	12894.9	1.76	35.98
38.0-39.0	9426.2	643.5	13538.4	1.80	37.77
39.0-40.0	9371.0	653.7	14192.1	1.82	39.60
40.0-41.0	9309.4	663.0	14855.1	1.85	41.45
41.0-42.0	9244.3	671.7	15526.8	1.87	43.32
42.0-43.0	9168.1	679.2	16206.0	1.90	45.22
43.0-44.0	9084.2	685.7	16891.8	1.91	47.13
44.0-45.0	8994.3	691.3	17583.1	1.93	49.06
45.0-46.0	8894.0	695.6	18278.7	1.94	51.00
46.0-47.0	8786.6	698.9	18977.7	1.95	52.95
47.0-48.0	8667.0	700.7	19678.4	1.96	54.91
48.0-49.0	8538.5	701.3	20379.7	1.96	56.86
49.0-50.0	8407.5	701.1	21080.8	1.96	58.82
50.0-51.0	8267.2	699.5	21780.3	1.95	60.77
51.0-52.0	8125.9	697.4	22477.7	1.95	62.72
52.0-53.0	7985.7	694.8	23172.4	1.94	64.66
53.0-54.0	7837.3	690.9	23863.3	1.93	66.58
54.0-55.0	7684.4	686.0	24549.3	1.91	68.50
55.0-56.0	7520.9	679.7	25229.0	1.90	70.39
56.0-57.0	7350.8	672.2	25901.2	1.88	72.27
57.0-58.0	7181.1	664.2	26565.4	1.85	74.12
58.0-59.0	6996.5	654.2	27219.6	1.83	75.95
59.0-60.0	6805.4	643.0	27862.6	1.79	77.74
60.0-61.0	6612.4	631.1	28493.7	1.76	79.50
61.0-62.0	6411.1	617.8	29111.5	1.72	81.23
62.0-63.0	6213.6	604.4	29715.9	1.69	82.91
63.0-64.0	6009.3	589.8	30305.7	1.65	84.56
64.0-65.0	5800.3	574.1	30879.8	1.60	86.16
65.0-66.0	5584.6	557.3	31437.1	1.55	87.72
66.0-67.0	5339.0	536.9	31974.0	1.50	89.21
67.0-68.0	5078.0	514.5	32488.4	1.44	90.65
68.0-69.0	4798.0	489.5	32978.0	1.37	92.01
69.0-70.0	4491.1	461.3	33439.3	1.29	93.30
70.0-71.0	4167.1	430.8	33870.0	1.20	94.50
71.0-72.0	3803.7	395.6	34265.6	1.10	95.61

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