

PHOTOMETRIC RESULT

Name :			
File :	MXL-100.IES	Length :	0.000 m
Report No. :	20170511	Width :	0.000 m
Catalog No. :		Height :	0.000 m
Lamp Shape :	Point	Operator :	MIN
# of Lamp :	1		
Lum Flux :	11413.5 lm		
Date :	2017-05-11		
Comments :			

Information

Description :

[TEST] MXL-100
 [DATE] 2017.05.11
 [MANUFAC] (주)크로스텍
 [LUMINAIRE]
 Total Luminous Flux : 11413.5 lm
 Luminous Efficiency : 116.46 lm/W
 - Avg. Voltage = 229.65(V)
 - Avg. Current = 430.00(mA)
 - Avg. Wattage = 98.01(W)
 - Avg. PF = 0.9925
 - Avg. Frequency = 60.0014(Hz)

Luminaire Test Details :

Photometric Type : Type C
 Number of Lamps : 1
 Lumens per Lamp : 11413.5
 Input Watt : 98.01

Luminous Dimension :

Width : 0.000 m
 Length : 0.000 m
 Height : 0.000 m
 Shape : Point



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Flux Data [1/2]

Elevation	Cone	Lumens	Cumulative	Lamp %	Luminaire %
0.0°	0.0° - 1.3°	5.9	5.9	0.1	0.1
2.5°	1.3° - 3.8°	47.4	53.3	0.5	0.5
5.0°	3.8° - 6.3°	95.6	148.9	1.3	1.3
7.5°	6.3° - 8.8°	143.5	292.4	2.6	2.6
10.0°	8.8° - 11.3°	190.1	482.5	4.2	4.2
12.5°	11.3° - 13.8°	235.3	717.8	6.3	6.3
15.0°	13.8° - 16.3°	278.9	996.6	8.7	8.7
17.5°	16.3° - 18.8°	320.5	1317.1	11.5	11.5
20.0°	18.8° - 21.3°	359.6	1676.7	14.7	14.7
22.5°	21.3° - 23.8°	396.0	2072.6	18.2	18.2
25.0°	23.8° - 26.3°	428.5	2501.2	21.9	21.9
27.5°	26.3° - 28.8°	456.1	2957.2	25.9	25.9
30.0°	28.8° - 31.3°	476.5	3433.7	30.1	30.1
32.5°	31.3° - 33.8°	479.3	3913.0	34.3	34.3
35.0°	33.8° - 36.3°	497.1	4410.1	38.6	38.6
37.5°	36.3° - 38.8°	511.3	4921.4	43.1	43.1
40.0°	38.8° - 41.3°	522.1	5443.5	47.7	47.7
42.5°	41.3° - 43.8°	528.5	5972.0	52.3	52.3
45.0°	43.8° - 46.3°	530.5	6502.5	57.0	57.0
47.5°	46.3° - 48.8°	528.0	7030.5	61.6	61.6
50.0°	48.8° - 51.3°	521.0	7551.6	66.2	66.1
52.5°	51.3° - 53.8°	509.4	8060.9	70.6	70.6
55.0°	53.8° - 56.3°	493.0	8553.9	74.9	74.9
57.5°	56.3° - 58.8°	472.1	9026.0	79.1	79.1
60.0°	58.8° - 61.3°	446.7	9472.7	83.0	83.0
62.5°	61.3° - 63.8°	416.8	9889.4	86.6	86.6
65.0°	63.8° - 66.3°	381.2	10270.6	90.0	90.0
67.5°	66.3° - 68.8°	325.3	10595.9	92.8	92.8
70.0°	68.8° - 71.3°	263.4	10859.2	95.1	95.1
72.5°	71.3° - 73.8°	202.6	11061.9	96.9	96.9
75.0°	73.8° - 76.3°	148.8	11210.7	98.2	98.2
77.5°	76.3° - 78.8°	103.2	11313.9	99.1	99.1
80.0°	78.8° - 81.3°	61.4	11375.3	99.7	99.6
82.5°	81.3° - 83.8°	28.4	11403.7	99.9	99.9

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Flux Data [2/2]

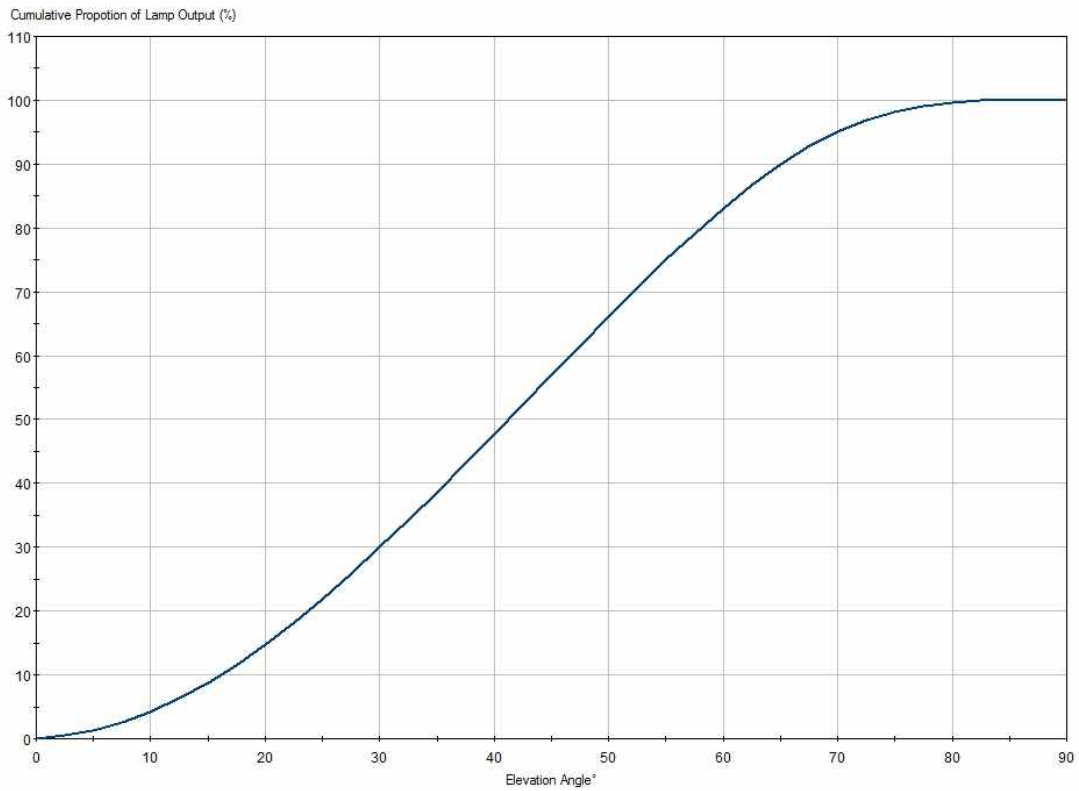
Elevation	Cone	Lumens	Cumulative	Lamp %	Luminaire %
85.0°	83.8° - 86.3°	6.2	11409.9	100.0	99.9
87.5°	86.3° - 88.8°	5.6	11415.4	100.0	100.0
90.0°	88.8° - 90.0°	2.0	11417.4	100.0	100.0

Light Output Ratio Luminaire(LORL) = 100.0%
 DLOR = 100.0% ULOR = 0.0%

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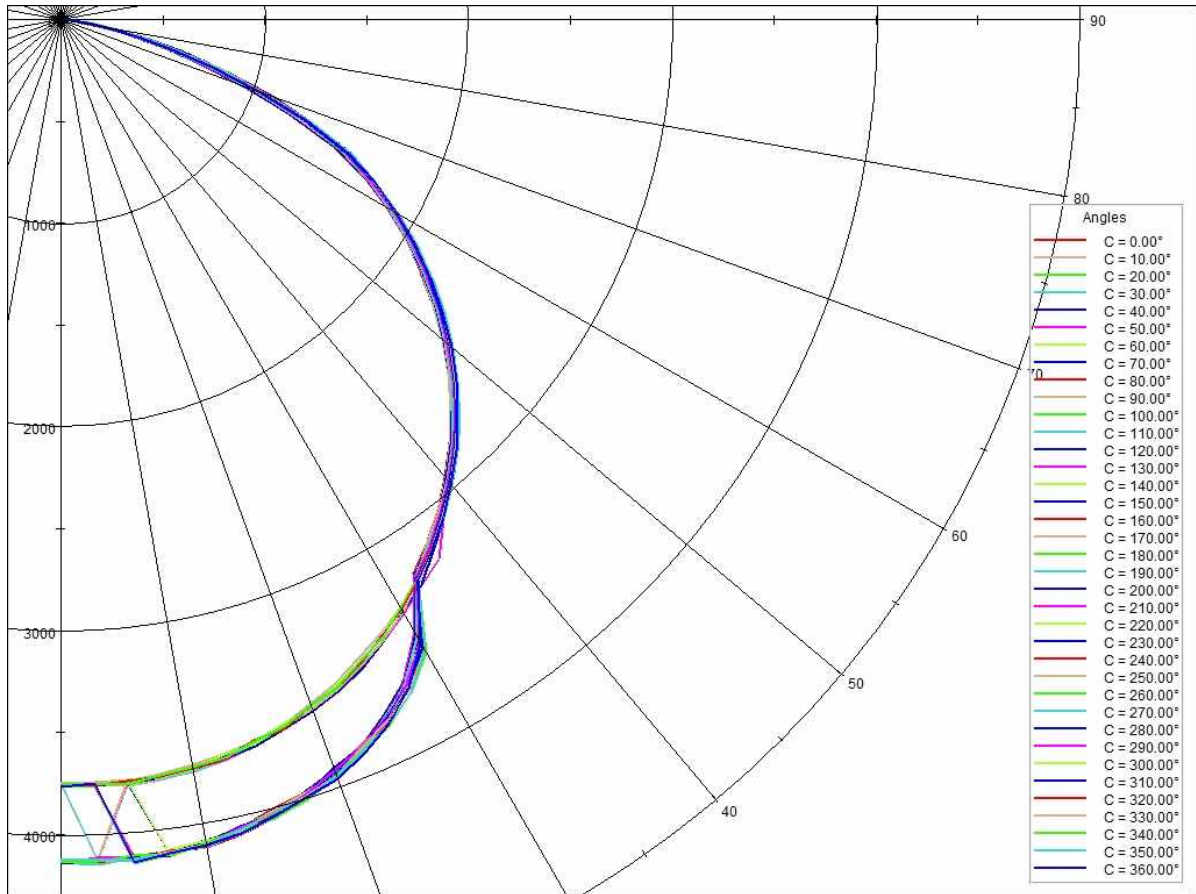
Flux Diagram



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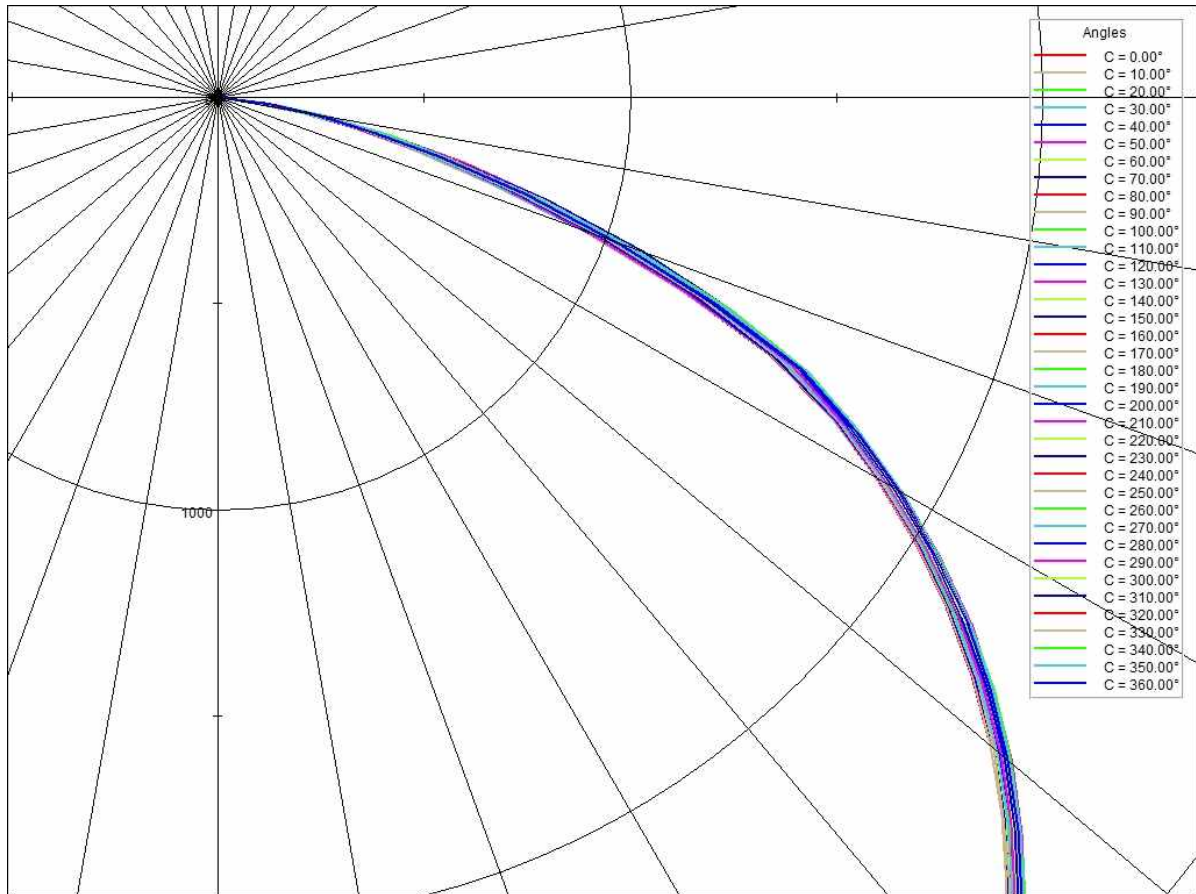
Polar Diagram



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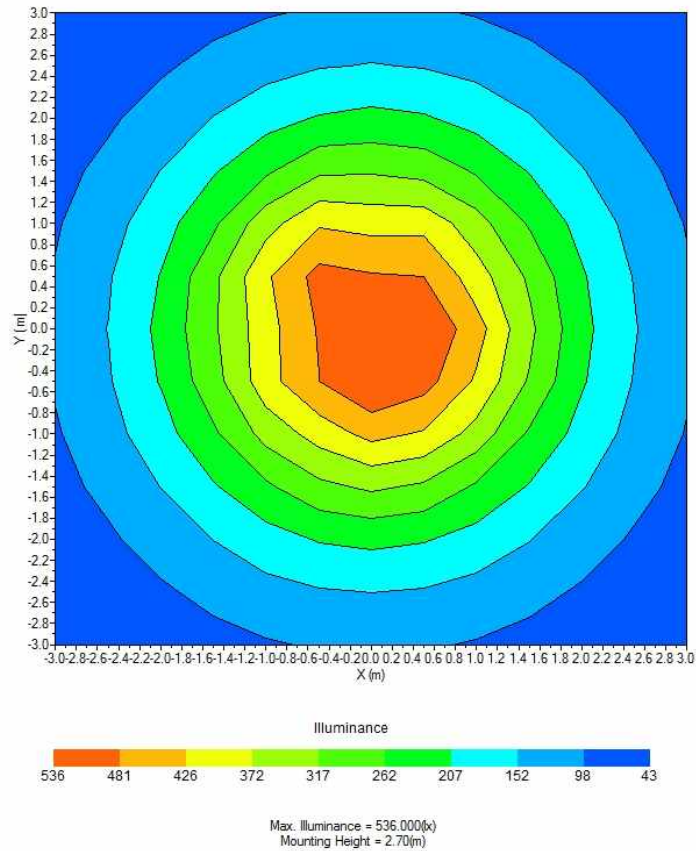
Polar Diagram (10%)



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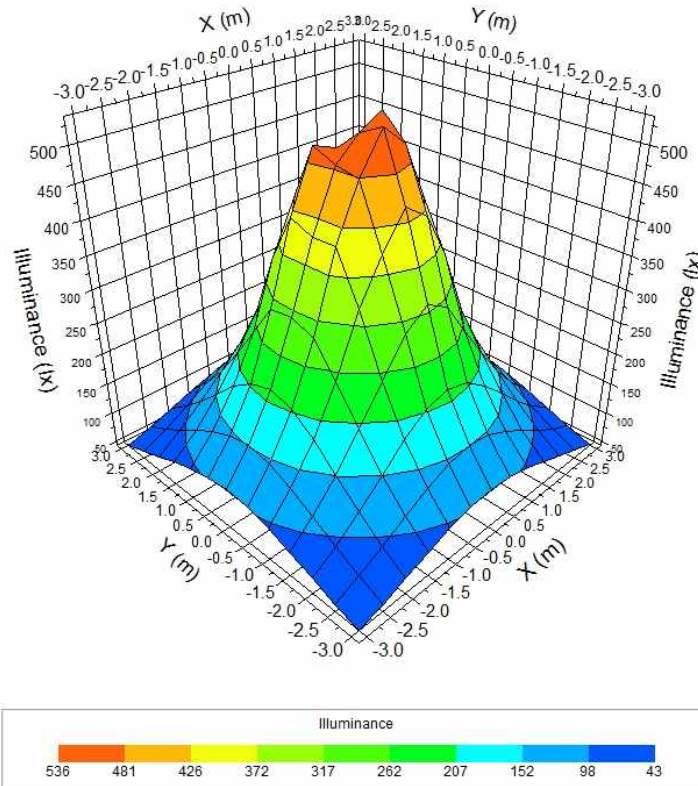
ISO Lux Diagram



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3D Lux Web

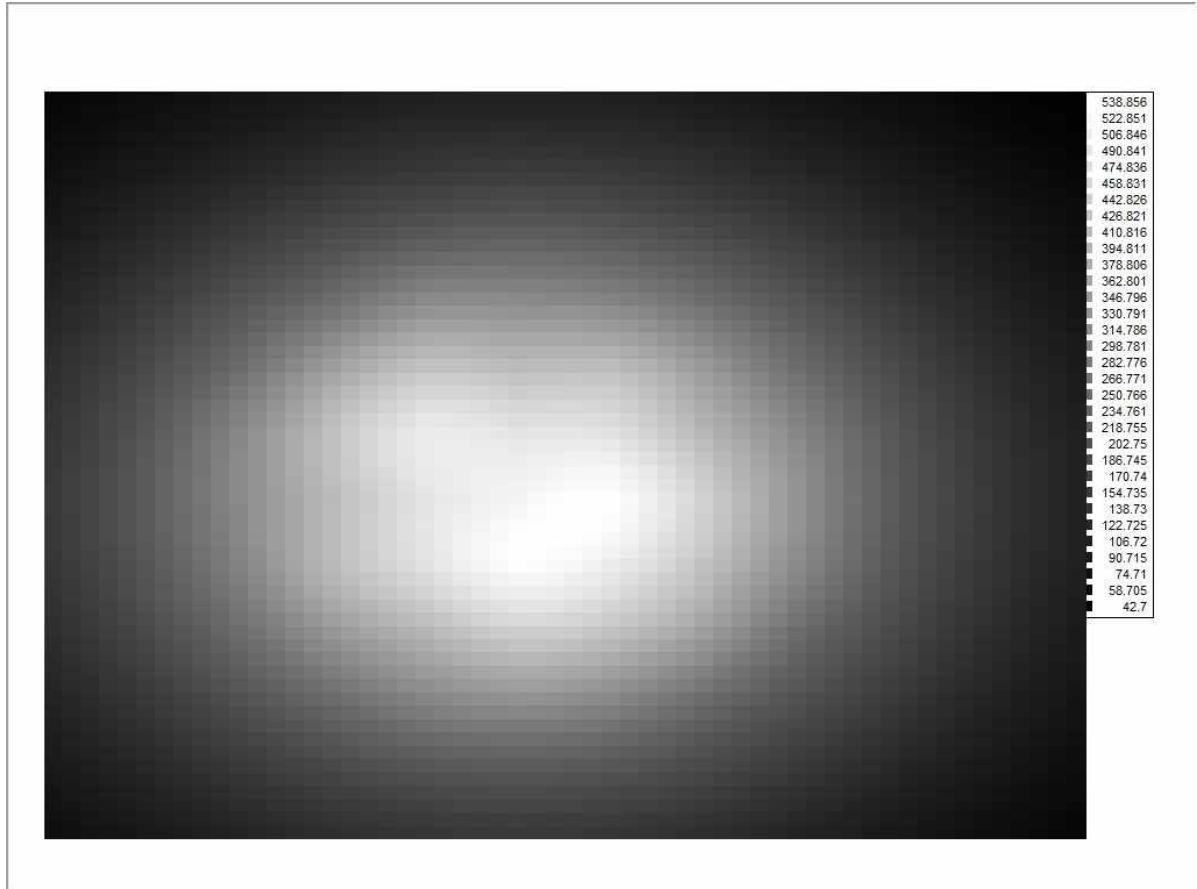


Max. Illuminance = 536.000(x)
Mounting Height = 2.70(m)

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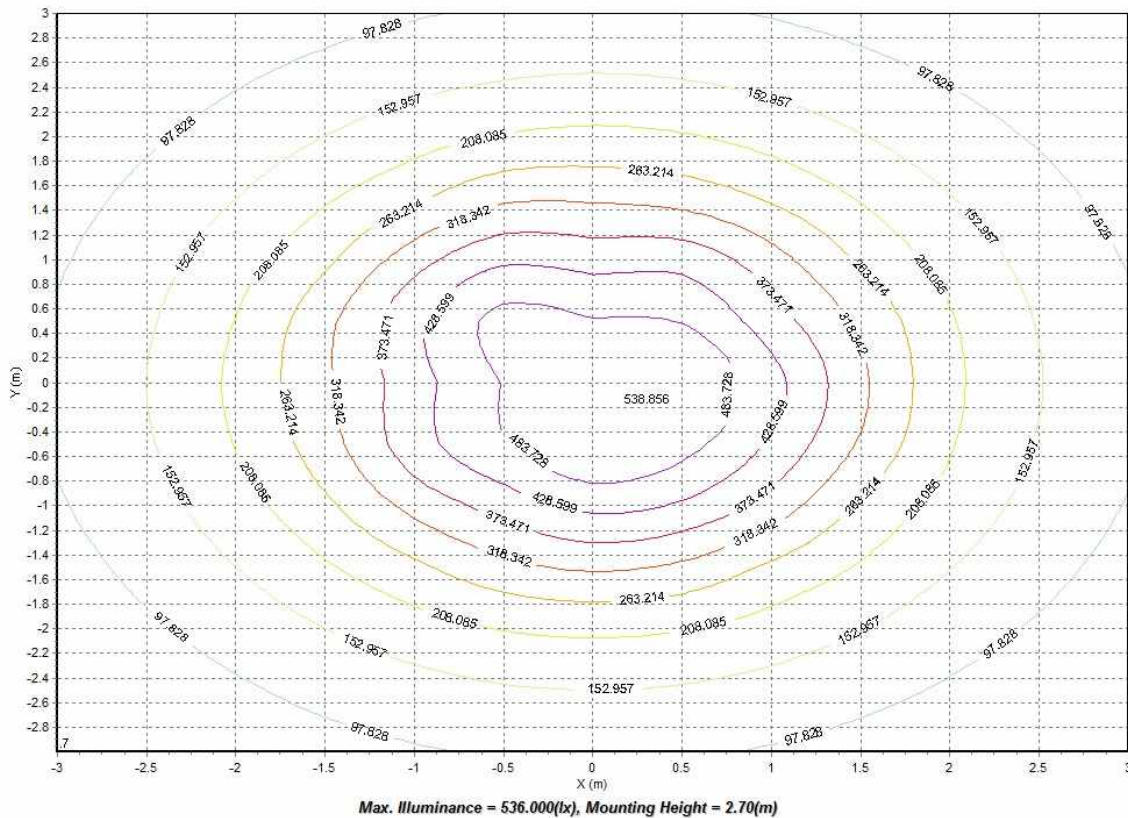
Grayed Illuminance



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IsoLux Contour



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Illuminance Grid

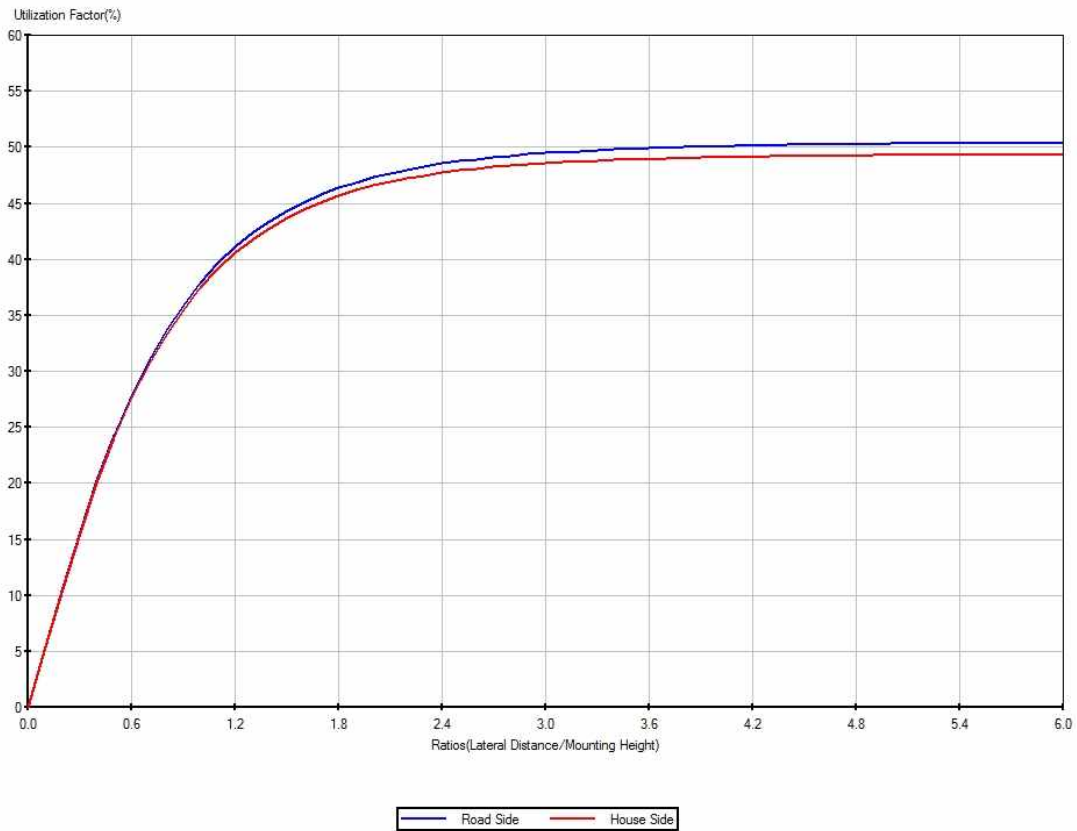
Y/X	-3.00	-2.50	-2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	2.50	3.00
3.00	42.9	54.6	67.7	81.5	94.3	103.2	106.8	103.6	95.0	82.5	68.8	55.7	44.0
2.50	54.2	71.0	91.1	112.6	133.4	148.5	154.6	149.1	134.7	114.0	92.6	72.4	55.5
2.00	67.3	90.5	119.8	153.3	186.3	211.5	221.4	212.5	187.7	155.2	121.8	92.5	68.9
1.50	80.7	112.1	152.7	201.7	252.1	308.5	310.5	297.4	255.5	204.0	155.2	114.3	82.7
1.00	92.8	132.0	185.2	251.4	349.3	419.1	406.5	408.4	339.7	255.0	188.0	134.6	95.1
0.50	101.6	146.7	209.6	303.2	417.8	500.4	486.5	481.3	396.9	307.7	213.1	149.7	104.1
0.00	105.7	153.4	220.2	308.9	405.1	486.3	516.9	536.0	447.9	329.3	221.9	155.0	107.0
-0.50	102.1	147.5	210.4	295.1	405.4	480.1	534.0	502.6	418.9	311.7	212.7	149.6	104.0
-1.00	93.4	132.6	185.6	252.0	336.0	395.4	443.8	419.9	351.7	253.6	187.6	134.6	95.2
-1.50	80.9	112.0	152.9	201.4	252.2	302.9	326.3	307.7	253.0	203.1	154.7	113.8	82.5
-2.00	67.3	90.7	119.6	152.8	185.7	210.6	220.1	211.1	186.6	154.1	121.1	92.1	68.6
-2.50	54.2	70.8	90.6	112.8	132.4	147.6	153.1	148.1	133.3	113.3	91.7	72.0	55.4
-3.00	42.7	54.1	67.4	81.1	93.3	102.4	105.6	102.7	94.0	81.8	68.2	55.0	43.6

All values in Lux, based on Luminaire Height of 2.7m
 Table Values : Average=188.26, Max.=536.00, Min=42.70
 Uniformity(minimum/average) =0.23

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UF Diagram



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UF Table [1/2]

Ratios(Distance/Mount Height)	Utilization Factor (Road Side)	Utilization Factor (House Side)
0.000	0.000	0.000
0.100	5.401	5.379
0.200	10.658	10.613
0.300	15.640	15.541
0.400	20.204	20.042
0.500	24.291	24.053
0.600	27.871	27.572
0.700	30.961	30.625
0.800	33.642	33.268
0.900	35.952	35.539
1.000	37.935	37.484
1.100	39.632	39.145
1.200	41.084	40.563
1.300	42.327	41.773
1.400	43.392	42.807
1.500	44.305	43.691
1.600	45.091	44.450
1.700	45.768	45.101
1.800	46.352	45.661
1.900	46.858	46.143
2.000	47.296	46.558
2.100	47.676	46.916
2.200	48.005	47.223
2.300	48.290	47.487
2.400	48.536	47.712
2.500	48.749	47.907
2.600	48.935	48.075
2.700	49.097	48.221
2.800	49.238	48.348
2.900	49.362	48.459
3.000	49.471	48.557
3.100	49.567	48.642
3.200	49.652	48.717
3.300	49.727	48.784

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UF Table [2/2]

Ratios(Distance/Mount Height)	Utilization Factor (Road Side)	Utilization Factor (House Side)
3.400	49.795	48.844
3.500	49.855	48.897
3.600	49.909	48.944
3.700	49.957	48.987
3.800	50.001	49.025
3.900	50.041	49.059
4.000	50.077	49.090
4.100	50.109	49.118
4.200	50.139	49.144
4.300	50.166	49.167
4.400	50.191	49.188
4.500	50.214	49.207
4.600	50.234	49.224
4.700	50.253	49.240
4.800	50.271	49.255
4.900	50.287	49.268
5.000	50.301	49.281
5.100	50.315	49.292
5.200	50.328	49.302
5.300	50.339	49.312
5.400	50.350	49.321
5.500	50.360	49.329
5.600	50.369	49.337
5.700	50.378	49.344
5.800	50.386	49.350
5.900	50.393	49.357
6.000	50.400	49.362

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IESNA Zonal-Cavity Coefficient Table

Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	60	50	30	10	60	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio	Coefficients of Utilization for 10% Effective Floor Cavity Reflectance																	
0	1.07	1.07	1.07	1.07	1.06	1.06	1.06	1.06	1.04	1.04	1.04	1.02	1.02	1.02	1.00	1.00	1.00	0.99
1	0.98	0.96	0.93	0.90	0.97	0.95	0.92	0.90	0.93	0.91	0.88	0.91	0.89	0.87	0.89	0.87	0.86	0.84
2	0.88	0.85	0.80	0.75	0.87	0.84	0.79	0.75	0.82	0.78	0.74	0.80	0.76	0.73	0.78	0.75	0.72	0.70
3	0.80	0.76	0.69	0.63	0.78	0.74	0.68	0.63	0.72	0.67	0.62	0.71	0.66	0.62	0.69	0.65	0.61	0.59
4	0.72	0.67	0.60	0.54	0.71	0.66	0.59	0.53	0.64	0.58	0.53	0.63	0.57	0.53	0.61	0.56	0.52	0.50
5	0.65	0.60	0.52	0.46	0.64	0.59	0.52	0.46	0.58	0.51	0.46	0.56	0.50	0.45	0.55	0.49	0.45	0.43
6	0.60	0.54	0.46	0.40	0.59	0.54	0.46	0.40	0.52	0.45	0.40	0.51	0.45	0.40	0.49	0.44	0.40	0.38
7	0.55	0.49	0.41	0.36	0.54	0.49	0.41	0.35	0.47	0.40	0.35	0.46	0.40	0.35	0.45	0.39	0.35	0.33
8	0.50	0.45	0.37	0.32	0.50	0.44	0.37	0.32	0.43	0.36	0.31	0.42	0.36	0.31	0.41	0.35	0.31	0.29
9	0.47	0.41	0.34	0.28	0.46	0.41	0.33	0.28	0.40	0.33	0.28	0.39	0.33	0.28	0.38	0.32	0.28	0.26
10	0.43	0.38	0.31	0.26	0.43	0.38	0.31	0.26	0.37	0.30	0.26	0.36	0.30	0.25	0.35	0.30	0.25	0.24

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TM5 Utilisation Factor Table

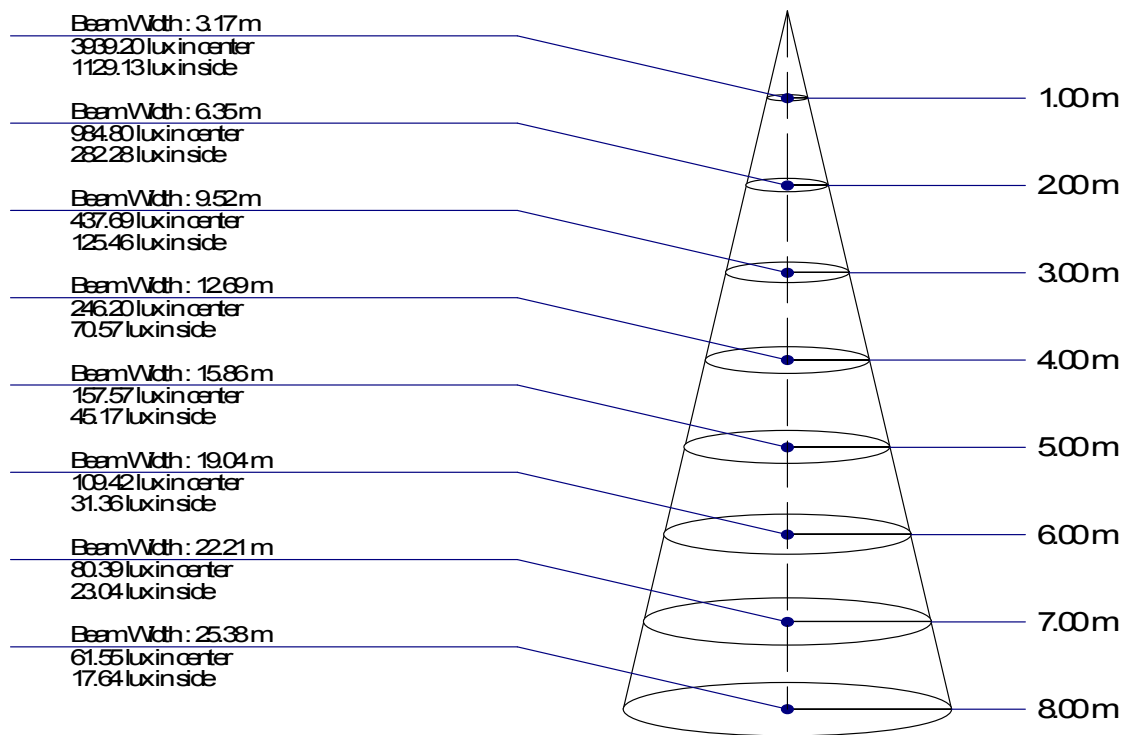
Utilisation Factor UFF standard Presentation			<i>SRNOV=1.25 SRMAX=1.48</i>								
Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.57	0.68	0.75	0.81	0.88	0.93	0.97	1.02	1.04
	0.30		0.49	0.60	0.68	0.74	0.82	0.88	0.92	0.98	1.01
	0.10		0.44	0.54	0.62	0.69	0.77	0.84	0.88	0.94	0.97
0.50	0.50	0.20	0.55	0.66	0.73	0.78	0.85	0.90	0.93	0.98	1.00
	0.30		0.48	0.59	0.67	0.72	0.80	0.86	0.89	0.94	0.97
	0.10		0.43	0.54	0.62	0.68	0.76	0.82	0.86	0.91	0.95
0.30	0.50	0.20	0.54	0.64	0.71	0.76	0.82	0.87	0.90	0.94	0.96
	0.30		0.48	0.58	0.65	0.71	0.78	0.83	0.87	0.91	0.94
	0.10		0.43	0.53	0.61	0.67	0.74	0.80	0.84	0.89	0.92
0.00	0.00	0.00	0.41	0.51	0.58	0.64	0.71	0.76	0.80	0.84	0.87
Distribution Factor		DR(F)	0.41	0.51	0.58	0.64	0.71	0.76	0.80	0.84	0.87
		DR(W)	0.59	0.49	0.42	0.37	0.29	0.24	0.20	0.16	0.13
		DR(C)	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
BZNumbers			5	4	4	4	4	4	4	4	4

Multiply UF values by service correction factors. Calculated in accordance with CIBS Technical Memorandum No.5 1980

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Conical Illuminance



Average Beam Angle = 115.6°
Max. Beam Angle = 117.2° at $\Phi 1 = 40^\circ \sim \Phi 2 = 220^\circ$
Min. Beam Angle = 113.9° at $\Phi 1 = 110^\circ \sim \Phi 2 = 290^\circ$

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CutOff Classification

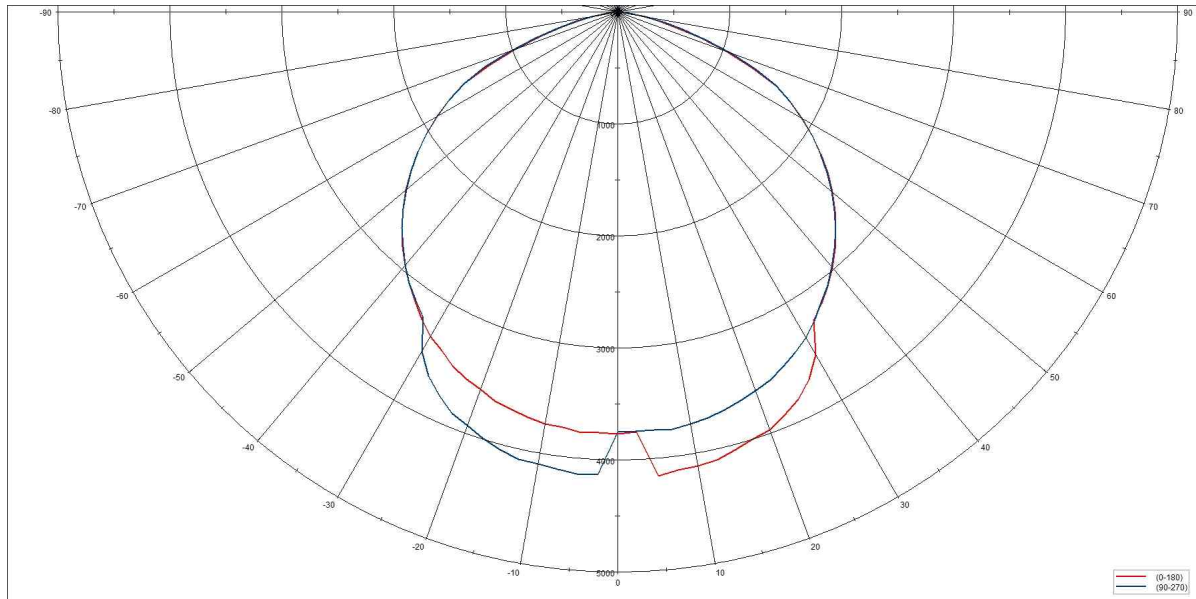
Classification	Candela at or above	
	90°	80°
Full Cutoff	0	<10%
Cutoff	<25%	<10%
Semicutoff	<5%	<20%
Noncutoff	NA	NA

Result		
Max. Candela	3642(cd/1000lm)	
Angle	90°	80°
cd/1000lm	1.33(cd/1000lm) : 0.33(%)	23.44(cd/1000lm) : 6.44(%)
Classification	Cutoff	

PHOTOMETRIC RESULT

Name :			
File :	MXL-100.IES	Length :	0.000 m
Report No. :	20170511	Width :	0.000 m
Catalog No. :		Height :	0.000 m
Lamp Shape :	Point	Operator :	MIN
# of Lamp :	1		
Lum Flux :	11413.5 lm		
Date :	2017-05-11		
Comments :			

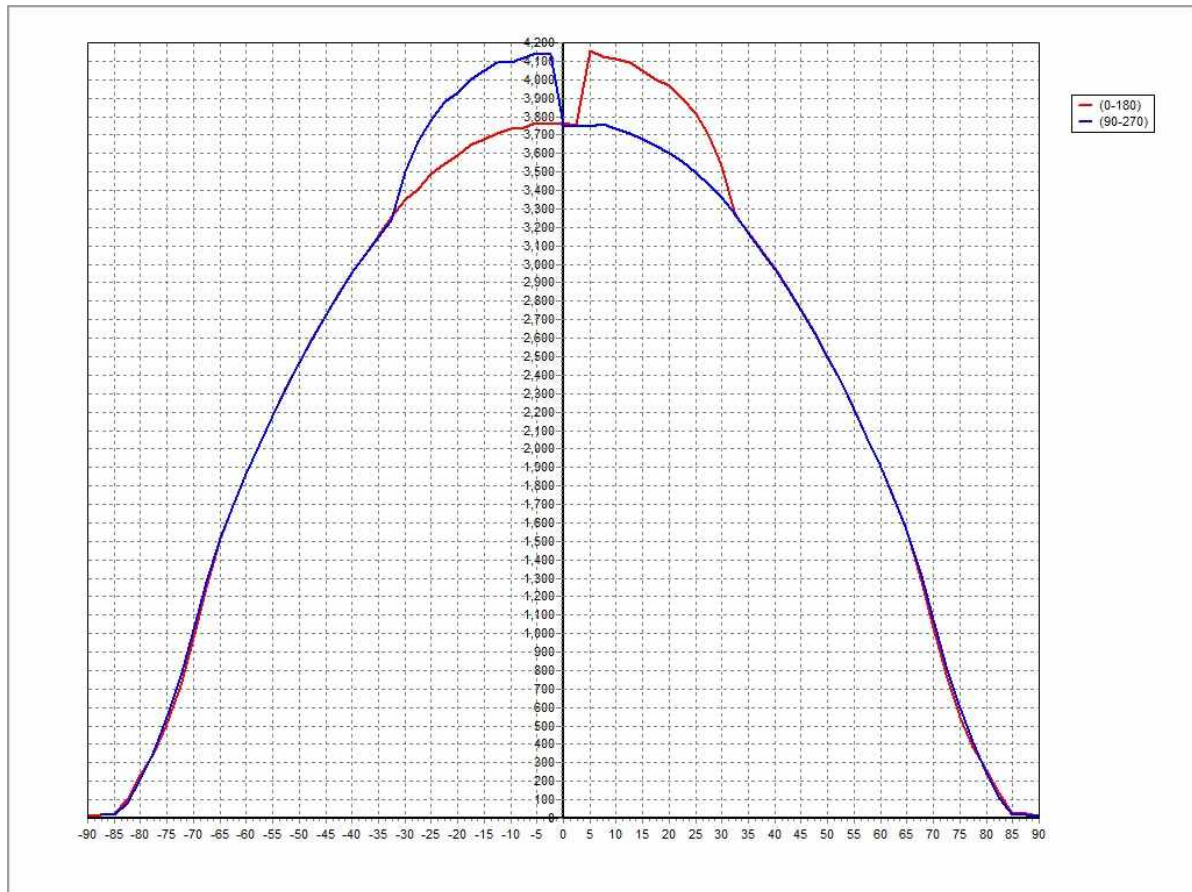
Polar Distribution



PHOTOMETRIC RESULT

Name :			
File :	MXL-100.IES	Length :	0.000 m
Report No. :	20170511	Width :	0.000 m
Catalog No. :		Height :	0.000 m
Lamp Shape :	Point	Operator :	MIN
# of Lamp :	1		
Lum Flux :	11413.5 lm		
Date :	2017-05-11		
Comments :			

Cartesian Distrib.



PHOTOMETRIC RESULT

Name :			
File :	MXL-100.IES	Length :	0.000 m
Report No. :	20170511	Width :	0.000 m
Catalog No. :		Height :	0.000 m
Lamp Shape :	Point	Operator :	MIN
# of Lamp :	1		
Lum Flux :	11413.5 lm		
Date :	2017-05-11		
Comments :			

Average Luminaire Luminance [cd/m^2]

Cannot calculate luminance for point source or Not Defined!

