

Luminaire Property

Luminaire: PL SQ 24w

Report NO.:

Test NO.:

Lamp: LED Panel Light

Sum Lumens: 2013.37 lm

Number of Lamps: 144

Diameter: 170x170x27mm

Length: 170mm

Photometric Type: Type C

Voltage: 220.2 V

Current: 0.102 A

Power: 22.0 W

Power Factor: 0.980

Ballast Type:

Width: 170mm

Height: 27mm

Remark:

Photometric Results

Lumens: 2013.37 lm

Effective luminous flux: 1978.01 lm

Efficiency: N.A

Central Intensity: 770.21cd

Maximum Intensity: 773.851cd

Beam Angle(10%): Left: -81.2 Right:75.0

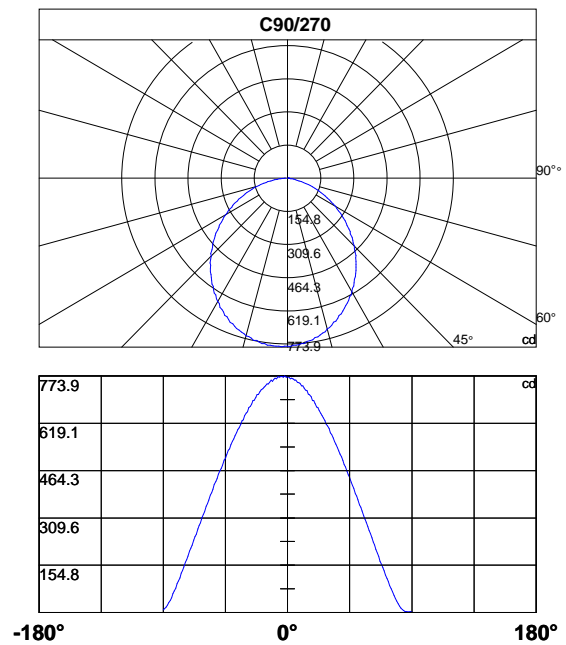
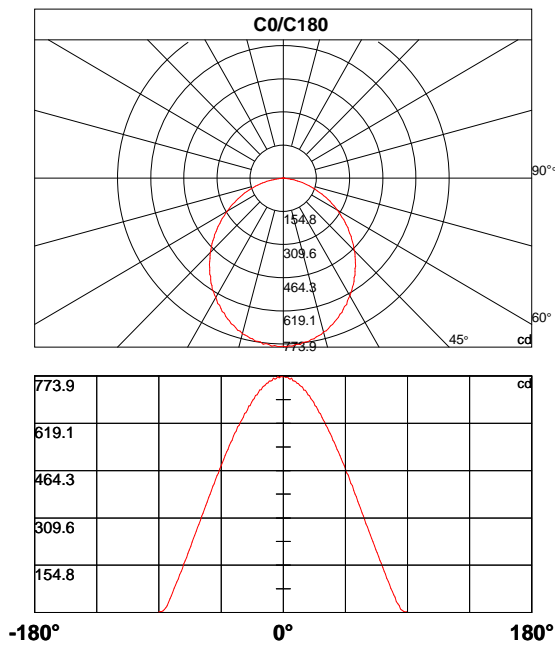
Angle of maximum intensity: C:225.0 G:2.0

Half Peak Side Angle(50%): Left: -55.6 Right:49.2

Light Out Rate(LOR) : 100.00%

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%



Photometric Data Table [cd]

C\G	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
0.0	770.2	772.3	768.5	771.0	765.7	763.7	766.2	758.1	757.4	757.0
45.0	770.2	771.3	765.1	767.0	764.2	760.4	760.2	753.1	752.6	749.7
90.0	770.2	771.3	765.1	767.0	764.2	760.4	760.2	753.1	752.6	749.7
135.0	770.2	771.6	771.2	767.8	771.8	765.8	763.2	767.0	759.1	757.8
180.0	770.2	771.6	771.2	767.8	771.8	765.8	763.2	767.0	759.1	757.8
225.0	770.2	769.5	773.9	770.5	771.6	771.7	769.6	771.6	765.2	767.1
270.0	770.2	769.5	773.9	770.5	771.6	771.7	769.6	771.6	765.2	767.1
315.0	770.2	772.3	768.5	771.0	765.7	763.7	766.2	758.1	757.4	757.0
360.0	770.2	772.3	768.5	771.0	765.7	763.7	766.2	758.1	757.4	757.0

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	750.1	749.3	743.7	739.9	737.0	728.2	726.7	720.6	711.8	709.2
45.0	741.3	741.5	734.0	728.0	725.7	714.6	712.6	705.6	694.1	693.7
90.0	741.3	741.5	734.0	728.0	725.7	714.6	712.6	705.6	694.1	693.7
135.0	757.4	750.7	750.0	743.7	740.5	737.3	728.7	727.7	720.2	712.3
180.0	757.4	750.7	750.0	743.7	740.5	737.3	728.7	727.7	720.2	712.3
225.0	763.1	756.6	760.2	753.2	747.8	748.0	741.6	737.2	732.3	728.8
270.0	763.1	756.6	760.2	753.2	747.8	748.0	741.6	737.2	732.3	728.8
315.0	750.1	749.3	743.7	739.9	737.0	728.2	726.7	720.6	711.8	709.2
360.0	750.1	749.3	743.7	739.9	737.0	728.2	726.7	720.6	711.8	709.2

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	699.8	693.8	687.7	676.7	674.1	663.5	653.5	650.8	638.1	629.3
45.0	683.8	673.2	670.5	661.3	652.1	644.2	636.8	627.7	615.7	611.2
90.0	683.8	673.2	670.5	661.3	652.1	644.2	636.8	627.7	615.7	611.2
135.0	710.0	700.2	695.2	688.1	677.1	675.1	663.6	653.8	651.2	639.1
180.0	710.0	700.2	695.2	688.1	677.1	675.1	663.6	653.8	651.2	639.1
225.0	723.0	713.7	713.2	703.6	694.5	694.0	681.7	674.3	670.6	657.1
270.0	723.0	713.7	713.2	703.6	694.5	694.0	681.7	674.3	670.6	657.1
315.0	699.8	693.8	687.7	676.7	674.1	663.5	653.5	650.8	638.1	629.3
360.0	699.8	693.8	687.7	676.7	674.1	663.5	653.5	650.8	638.1	629.3

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	623.6	612.6	604.1	594.1	586.1	575.8	563.6	557.1	544.1	533.1
45.0	601.7	587.6	582.6	570.9	559.1	550.9	540.1	529.4	517.9	509.1
90.0	601.7	587.6	582.6	570.9	559.1	550.9	540.1	529.4	517.9	509.1
135.0	629.8	623.6	613.1	607.8	594.2	586.8	576.9	563.8	558.0	545.3
180.0	629.8	623.6	613.1	607.8	594.2	586.8	576.9	563.8	558.0	545.3
225.0	652.3	644.2	631.1	627.1	616.5	604.9	599.1	588.3	577.9	568.1
270.0	652.3	644.2	631.1	627.1	616.5	604.9	599.1	588.3	577.9	568.1
315.0	623.6	612.6	604.1	594.1	586.1	575.8	563.6	557.1	544.1	533.1
360.0	623.6	612.6	604.1	594.1	586.1	575.8	563.6	557.1	544.1	533.1

Photometric Data Table [cd]

C\G	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	525.8	513.7	502.6	491.9	481.8	470.4	456.9	448.9	435.9	421.8
45.0	497.4	484.1	476.3	462.2	450.3	442.2	425.9	416.3	406.3	388.5
90.0	497.4	484.1	476.3	462.2	450.3	442.2	425.9	416.3	406.3	388.5
135.0	533.4	525.6	513.3	501.6	491.2	481.1	469.3	455.9	448.1	434.6
180.0	533.4	525.6	513.3	501.6	491.2	481.1	469.3	455.9	448.1	434.6
225.0	560.7	548.9	535.6	530.6	516.4	503.4	498.6	482.1	471.2	464.1
270.0	560.7	548.9	535.6	530.6	516.4	503.4	498.6	482.1	471.2	464.1
315.0	525.8	513.7	502.6	491.9	481.8	470.4	456.9	448.9	435.9	421.8
360.0	525.8	513.7	502.6	491.9	481.8	470.4	456.9	448.9	435.9	421.8

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	414.5	399.3	387.3	378.7	362.7	352.0	341.2	325.5	316.3	303.8
45.0	381.3	369.2	352.0	344.4	332.4	316.2	306.2	295.4	280.8	268.3
90.0	381.3	369.2	352.0	344.4	332.4	316.2	306.2	295.4	280.8	268.3
135.0	420.7	413.1	398.2	386.2	376.8	360.8	351.3	339.4	324.2	315.3
180.0	420.7	413.1	398.2	386.2	376.8	360.8	351.3	339.4	324.2	315.3
225.0	452.7	438.3	427.9	419.2	403.6	391.7	384.3	367.4	356.0	347.7
270.0	452.7	438.3	427.9	419.2	403.6	391.7	384.3	367.4	356.0	347.7
315.0	414.5	399.3	387.3	378.7	362.7	352.0	341.2	325.5	316.3	303.8
360.0	414.5	399.3	387.3	378.7	362.7	352.0	341.2	325.5	316.3	303.8

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	289.8	279.4	267.5	253.8	242.3	231.8	217.8	205.0	196.2	181.9
45.0	258.3	243.8	230.4	220.9	205.8	193.6	183.5	168.1	157.5	146.5
90.0	258.3	243.8	230.4	220.9	205.8	193.6	183.5	168.1	157.5	146.5
135.0	301.9	288.4	278.3	266.0	252.5	241.7	230.0	216.9	204.8	194.3
180.0	301.9	288.4	278.3	266.0	252.5	241.7	230.0	216.9	204.8	194.3
225.0	329.7	320.2	310.9	292.7	284.4	273.4	255.7	248.2	236.6	220.3
270.0	329.7	320.2	310.9	292.7	284.4	273.4	255.7	248.2	236.6	220.3
315.0	289.8	279.4	267.5	253.8	242.3	231.8	217.8	205.0	196.2	181.9
360.0	289.8	279.4	267.5	253.8	242.3	231.8	217.8	205.0	196.2	181.9

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	169.3	160.8	146.4	134.9	125.5	111.6	101.6	91.8	77.9	67.9
45.0	136.3	122.8	110.6	101.6	88.3	77.3	68.0	55.1	46.0	37.6
90.0	136.3	122.8	110.6	101.6	88.3	77.3	68.0	55.1	46.0	37.6
135.0	180.3	168.9	158.9	144.8	134.3	123.8	109.5	99.8	88.6	79.5
180.0	180.3	168.9	158.9	144.8	134.3	123.8	109.5	99.8	88.6	79.5
225.0	210.5	200.5	184.3	172.9	164.6	148.5	136.8	129.1	113.3	102.5
270.0	210.5	200.5	184.3	172.9	164.6	148.5	136.8	129.1	113.3	102.5
315.0	169.3	160.8	146.4	134.9	125.5	111.6	101.6	91.8	77.9	67.9
360.0	169.3	160.8	146.4	134.9	125.5	111.6	101.6	91.8	77.9	67.9

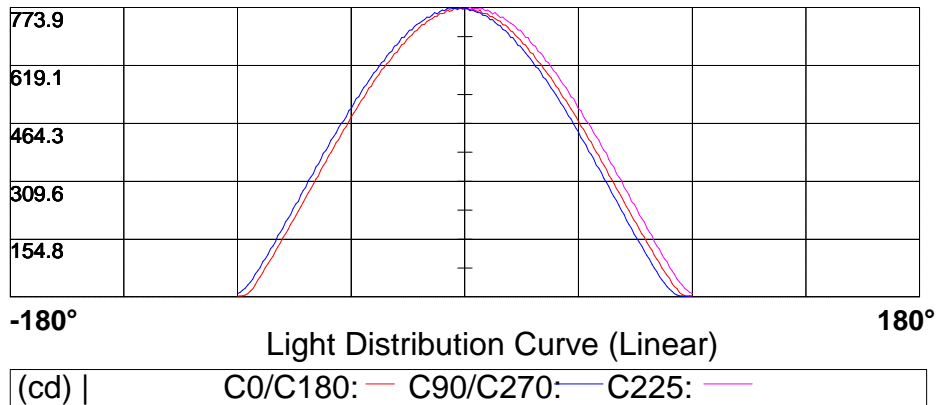
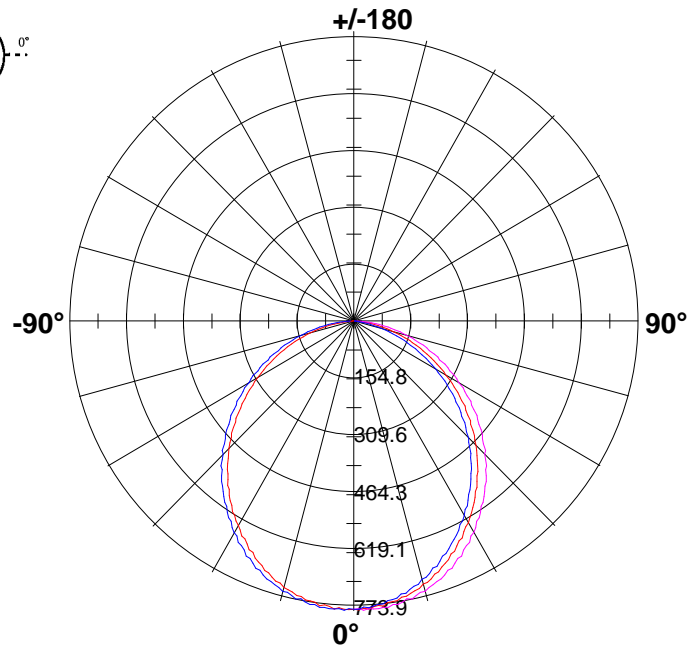
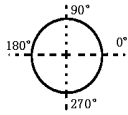
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	58.1	49.9	35.6	28.4	22.4	11.6	7.1	3.8	2.6	2.6
45.0	27.8	20.9	14.6	9.1	5.9	3.1	3.1	2.6	2.7	2.8
90.0	27.8	20.9	14.6	9.1	5.9	3.1	3.1	2.6	2.7	2.8
135.0	65.5	54.1	44.9	32.0	22.3	16.0	9.3	5.6	3.4	2.8
180.0	65.5	54.1	44.9	32.0	22.3	16.0	9.3	5.6	3.4	2.8
225.0	94.5	79.6	69.8	61.3	48.5	39.5	32.1	23.9	18.3	12.6
270.0	94.5	79.6	69.8	61.3	48.5	39.5	32.1	23.9	18.3	12.6
315.0	58.1	49.9	35.6	28.4	22.4	11.6	7.1	3.8	2.6	2.6
360.0	58.1	49.9	35.6	28.4	22.4	11.6	7.1	3.8	2.6	2.6

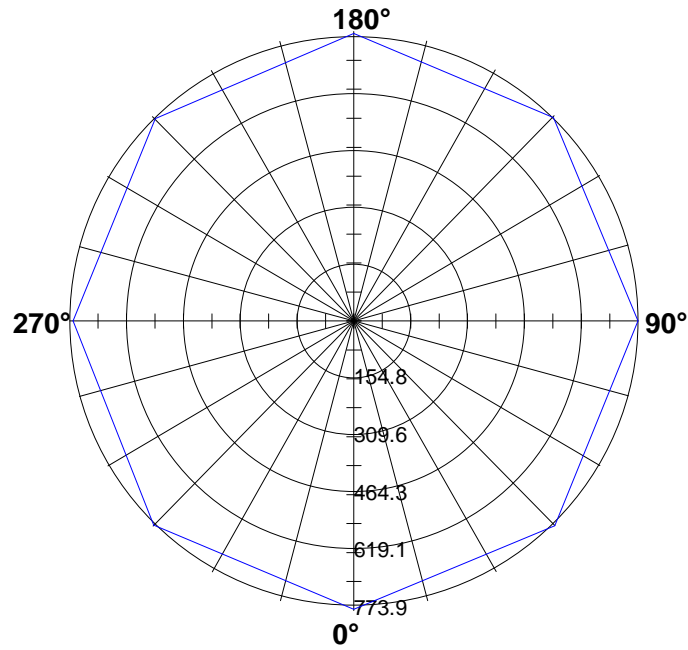
C\G	90.0
0.0	2.4
45.0	2.1
90.0	2.1
135.0	1.9
180.0	1.9
225.0	8.6
270.0	8.6
315.0	2.4
360.0	2.4

Light Distribution Curve [Unit: cd]

Luminaire

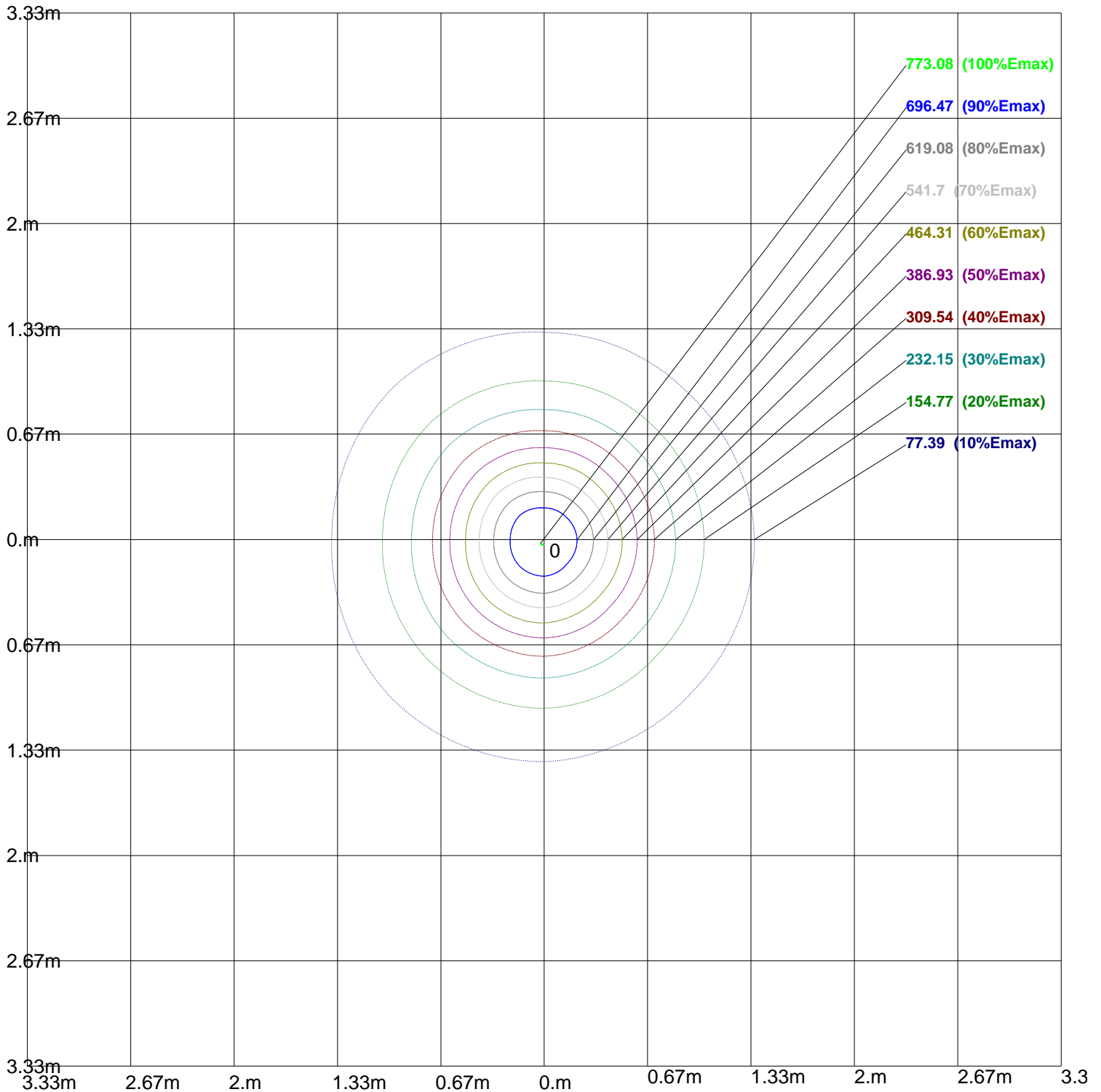


Max Plane Light Distribution Curve [Unit: cd]



773.9							
619.1							
464.3							
309.6							
154.8							
-180°	Light Distribution Curve (Linear)						180°
(cd)	γ2: —						

Iso-Lux[lx]



Height: 1 m
Max Illuminance : 773.85lx

Luminance Limiting Curve

Diameter: 170x170x27mm

Length: 170mm

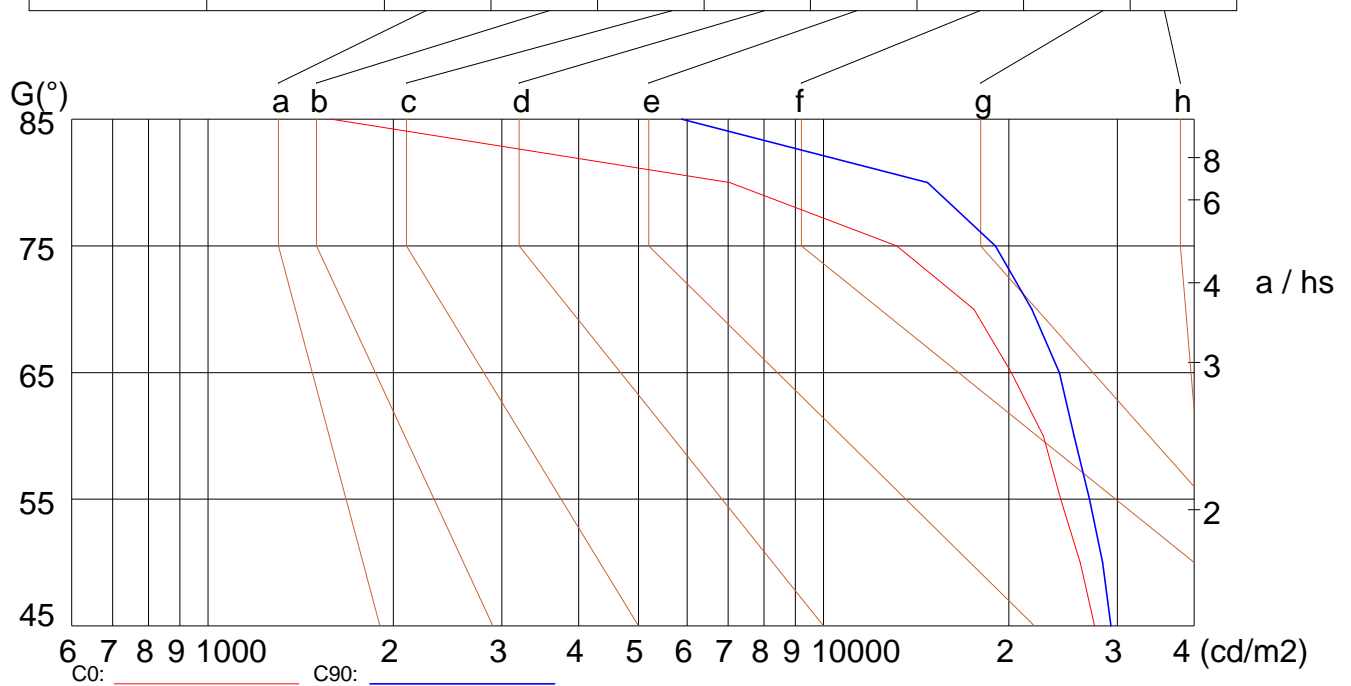
Width: 170mm

Height: 27mm

(cd/m²)

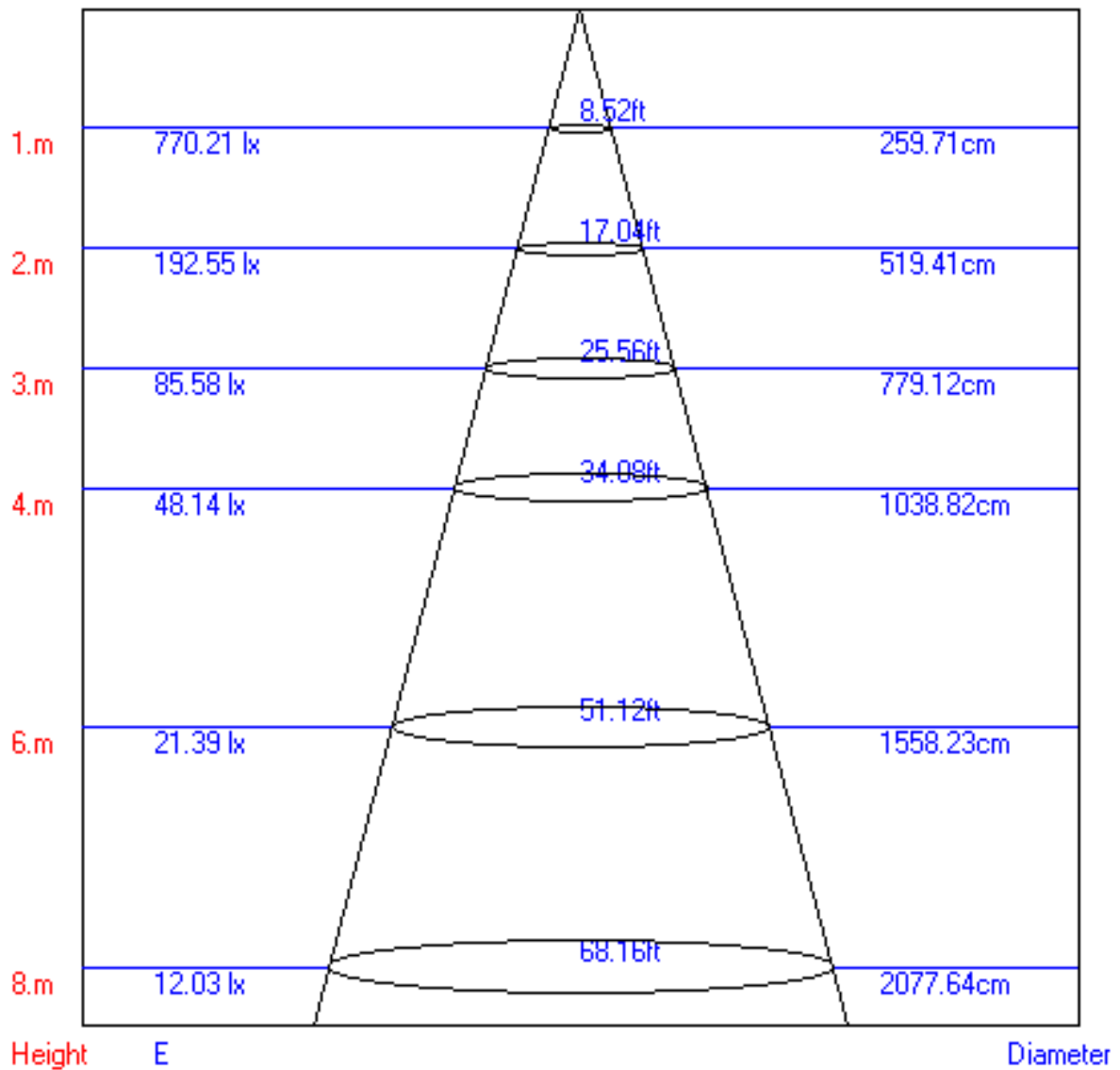
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	27548	26132	24283	22756	20185	17552	13149	7040	1584
C90	29308	28411	27038	25532	24160	21802	19001	14747	5878

Glare	Quality	Service Values Illuminance (lx)							
1.15	A	2000	1000	500	≤300				
1.5	B		2000	1000	500	≤300			
1.85	C			2000	1000	500	≤300		
2.2	D				2000	1000	500	≤300	
2.55	E					2000	1000	500	≤300



Lum. Limiting Curve (C0/C90)

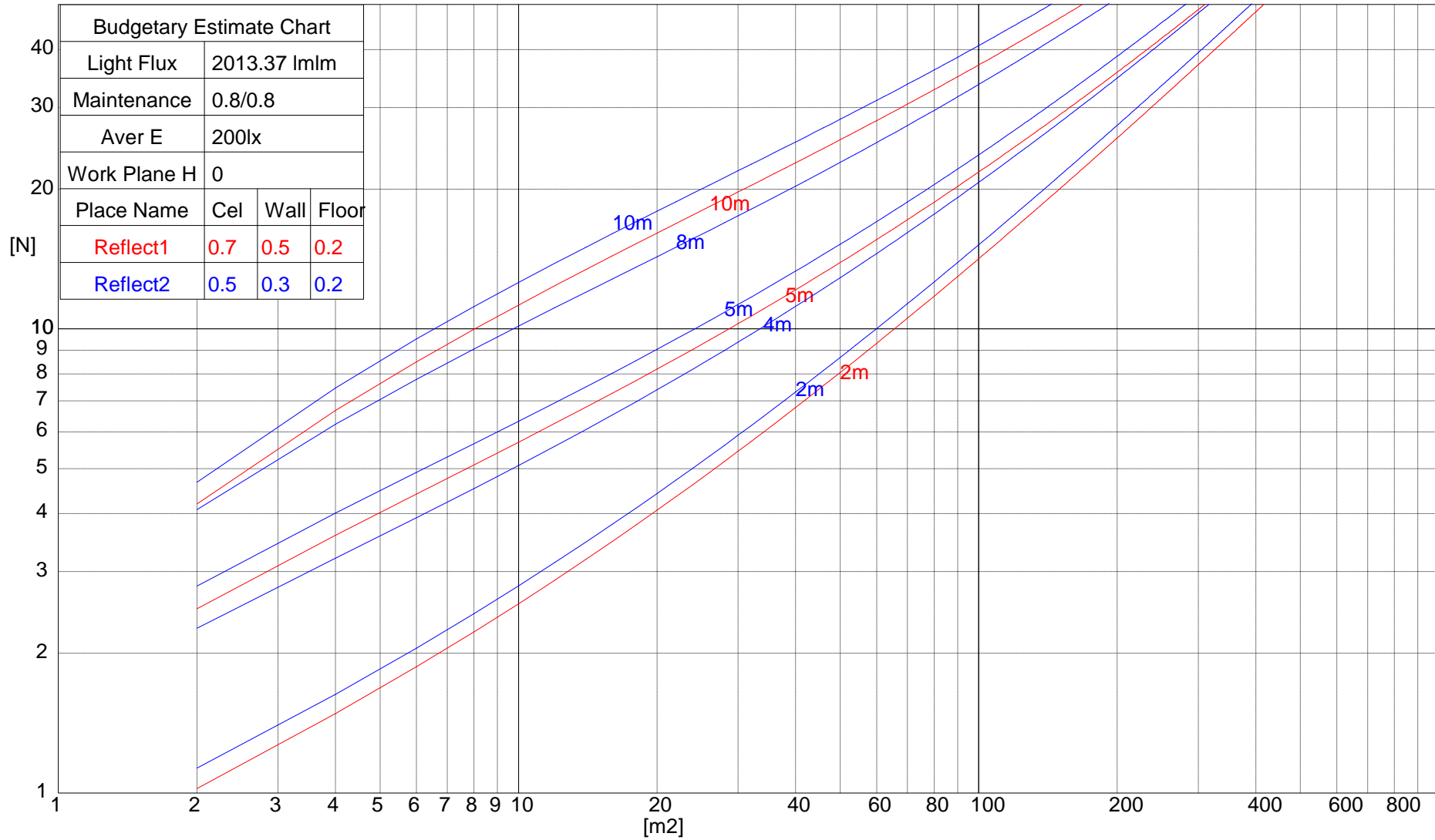
Lux-Distance Curve



Beam Angle:104.80°

Utilization Coefficient Table

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RRC	COEFFICIENTS OF UTILIZATION FOR RHOFC=20															
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.05	1.04	1.02	1.04	1.02	1.00	1.00	0.98	0.96	0.95	0.93	0.91	0.89	0.87	0.85	0.79
2	0.90	0.87	0.86	0.89	0.86	0.84	0.87	0.83	0.80	0.83	0.80	0.76	0.79	0.75	0.71	0.67
3	0.77	0.74	0.72	0.77	0.74	0.71	0.76	0.72	0.68	0.74	0.69	0.65	0.70	0.65	0.61	0.56
4	0.67	0.64	0.62	0.67	0.64	0.61	0.67	0.62	0.58	0.65	0.60	0.56	0.63	0.57	0.52	0.48
5	0.59	0.56	0.54	0.59	0.55	0.53	0.59	0.54	0.51	0.59	0.53	0.48	0.57	0.51	0.46	0.42
6	0.52	0.49	0.47	0.53	0.49	0.46	0.53	0.48	0.45	0.53	0.47	0.43	0.52	0.46	0.40	0.37
7	0.46	0.44	0.42	0.47	0.43	0.41	0.48	0.43	0.40	0.48	0.42	0.38	0.48	0.41	0.36	0.33
8	0.42	0.39	0.38	0.42	0.39	0.37	0.44	0.39	0.35	0.44	0.38	0.34	0.44	0.37	0.32	0.29
9	0.38	0.35	0.34	0.39	0.35	0.33	0.40	0.35	0.32	0.41	0.35	0.31	0.41	0.34	0.29	0.26
10	0.34	0.32	0.31	0.35	0.32	0.30	0.37	0.32	0.29	0.38	0.32	0.28	0.38	0.31	0.27	0.24



UGR Glare Index

Ceiling	70	70	50	50	30	70	70	50	50	30	
Wall	50	30	50	30	30	50	30	50	30	30	
Floor	20	20	20	20	20	20	20	20	20	20	
Room Size X Y	Weft to light axis direction of observation					Direction of light axis parallel observation					
2H	2H	14.7	16.0	14.9	15.9	16.5	14.7	15.9	14.8	16.0	16.5
	3H	16.3	17.4	16.7	17.9	17.9	16.2	17.4	16.4	17.8	18.0
	4H	16.9	18.1	17.4	18.7	18.8	16.9	18.1	17.3	18.5	18.8
	6H	17.6	18.5	18.0	18.9	18.9	17.4	18.3	17.8	18.9	19.0
	8H	17.8	18.9	18.1	19.0	19.3	17.7	18.7	17.9	19.0	19.3
4H	12H	17.9	18.8	18.1	19.2	19.5	17.7	18.7	18.1	19.2	19.6
	2H	15.7	16.6	15.9	16.8	17.0	15.6	16.6	15.8	16.9	17.0
	3H	17.5	18.4	17.7	18.4	18.8	17.3	18.2	17.6	18.3	18.7
	4H	18.3	18.9	18.5	19.1	19.5	18.0	18.9	18.4	19.1	19.6
	6H	18.8	19.5	19.1	19.8	20.2	18.7	19.5	18.9	19.7	20.0
8H	8H	19.0	19.7	19.4	20.0	20.3	19.0	19.5	19.3	20.0	20.3
	12H	19.2	19.8	19.7	20.0	20.5	19.1	19.8	19.5	20.1	20.5
	4H	18.5	19.2	18.8	19.4	19.8	18.5	19.1	18.7	19.4	19.8
	6H	19.3	19.8	19.8	20.2	20.6	19.2	19.7	19.6	20.2	20.5
	8H	19.8	20.2	20.2	20.5	20.9	19.6	20.0	20.1	20.4	21.0
12H	12H	20.0	20.4	20.4	20.9	21.1	19.8	20.3	20.3	20.8	21.2
	4H	18.6	19.2	19.1	19.6	19.8	18.5	19.0	18.9	19.4	19.8
	6H	19.5	20.0	19.9	20.2	20.7	19.4	19.9	19.8	20.2	20.6
	8H	19.9	20.3	20.4	20.5	21.1	19.8	20.2	20.3	20.6	21.0