



R36 series

R36-189S

18w



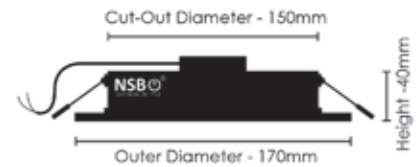
SIRIM
 CERTIFIED TO: IEC 60598-1: 2017
 IEC 60598-2-2: 2011
 CERTIFICATION NO: PC011267

R36-189S-18W

Type Indoor Recessed Downlight
Housing Color White
Material Nylon+PC

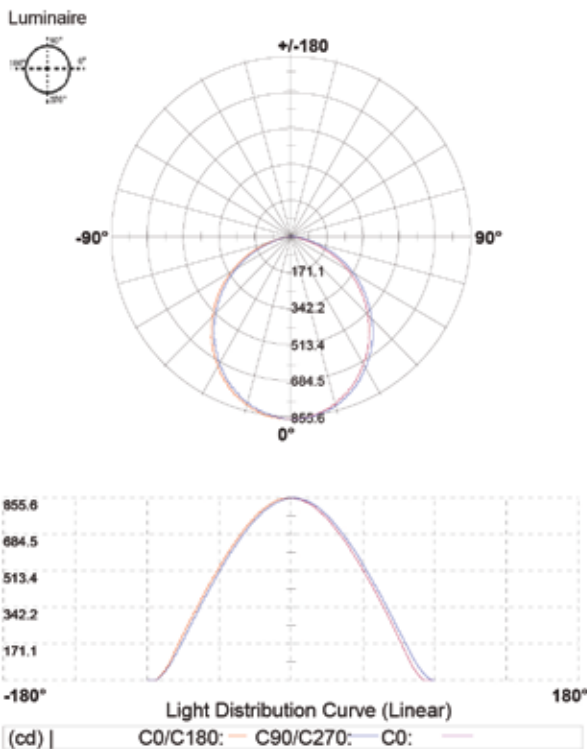
Power Factor ≥ 0.95
Power Efficiency 126lm/W
Voltage Input 180 - 240V 50/60Hz
Surge Protector 2.5kv

Beam Angle 120+- Degree
CRI ≥ 85
LED Model 2835
Lumen 6000K 2167lm
Lumen 4000K 2167lm
Lumen 3000K 2056lm
Lumen 3C 2167lm
Life Span 30,000 hours

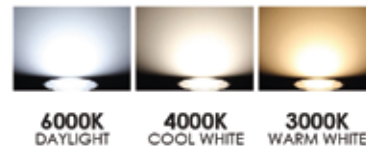


- BLUE LIGHT PROTECTED
- FLICKER FREE
- NO ULTRAVIOLET
- COLOR RENDERING INDEX
- POWER FACTOR
- ENERGY SAVING
- LONG LIFE SPAN
- IP20
- SIRIM APPROVED
- EDISON LED

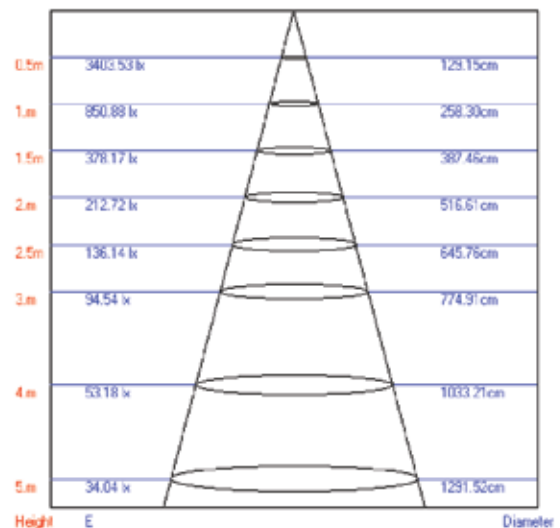
Luminous Intensity Distribution Curve :



Light Temperature :



LUX Distance Diagram :



Luminaire Property

Luminaire:

Report NO.:

Test NO.:

Lamp:

Sum Lumens: 2166.65 lm

Number of Lamps: 1

Diameter: 200mm

Length: mm

Photometric Type: Type C

Voltage: 220.7 V

Current: 0.084 A

Power: 16.4 W

Power Factor: 0.881

Ballast Type:

Width: mm

Height: mm

Remark:

Photometric Results

Lumens: 2166.65 lm

Efficiency: 125.968 lm/W

Central Intensity: 850.881cd

Maximum Intensity: 855.603cd

Angle of maximum intensity: C:0.0 G:1.0

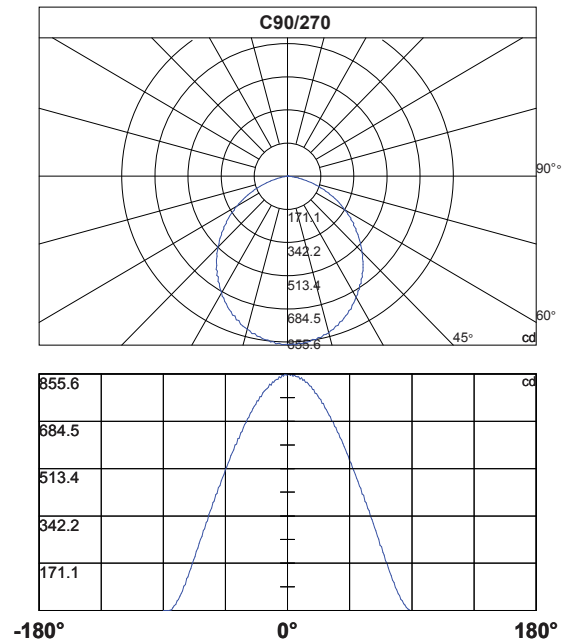
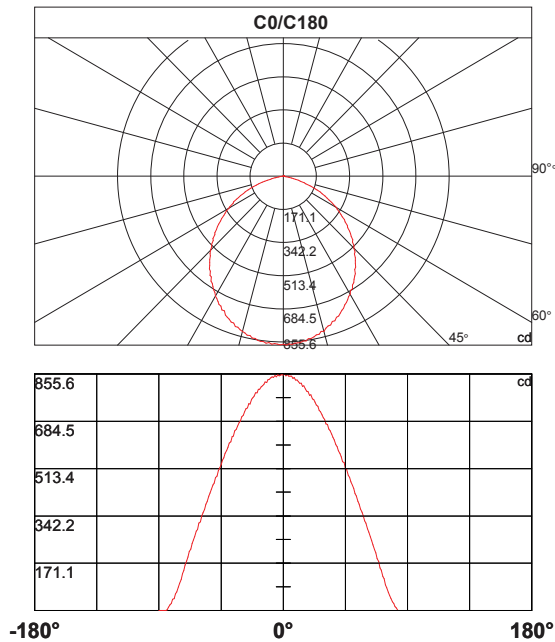
Half Peak Side Angle(50%): Left: -53.8 Right:50.7

Light Out Rate(LOR) : 100.00%

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -77.0 Right:73.7



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	850.9	855.6	849.5	853.4	848.4	847.2	848.1	840.1	843.2	833.5
45.0	850.9	855.5	850.5	854.8	847.2	851.6	846.7	845.9	845.1	837.9
90.0	850.9	855.5	850.5	854.8	847.2	851.6	846.7	845.9	845.1	837.9
135.0	850.9	853.6	851.6	849.3	852.2	845.7	850.3	843.7	845.0	841.5
180.0	850.9	853.6	851.6	849.3	852.2	845.7	850.3	843.7	845.0	841.5
225.0	850.9	852.3	853.0	847.3	850.8	841.8	845.1	835.8	836.0	832.4
270.0	850.9	852.3	853.0	847.3	850.8	841.8	845.1	835.8	836.0	832.4
315.0	850.9	855.6	849.5	853.4	848.4	847.2	848.1	840.1	843.2	833.5
360.0	850.9	855.6	849.5	853.4	848.4	847.2	848.1	840.1	843.2	833.5

C/G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	833.6	828.8	822.2	822.4	810.9	813.2	801.9	793.4	792.4	778.3
45.0	841.5	832.6	835.2	825.8	825.8	819.9	813.1	811.0	799.9	799.6
90.0	841.5	832.6	835.2	825.8	825.8	819.9	813.1	811.0	799.9	799.6
135.0	835.6	835.2	824.9	826.6	817.6	813.5	809.8	799.9	800.2	787.0
180.0	835.6	835.2	824.9	826.6	817.6	813.5	809.8	799.9	800.2	787.0
225.0	825.5	826.6	815.6	818.9	806.8	802.7	797.7	793.4	786.9	773.5
270.0	825.5	826.6	815.6	818.9	806.8	802.7	797.7	793.4	786.9	773.5
315.0	833.6	828.8	822.2	822.4	810.9	813.2	801.9	793.4	792.4	778.3
360.0	833.6	828.8	822.2	822.4	810.9	813.2	801.9	793.4	792.4	778.3

C/G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	780.8	765.9	763.3	754.3	744.0	738.7	724.2	719.3	708.0	696.9
45.0	786.7	784.8	775.7	767.9	763.3	750.1	749.5	733.2	727.7	717.5
90.0	786.7	784.8	775.7	767.9	763.3	750.1	749.5	733.2	727.7	717.5
135.0	786.9	775.4	770.4	763.7	747.0	748.2	732.8	729.6	718.9	707.0
180.0	786.9	775.4	770.4	763.7	747.0	748.2	732.8	729.6	718.9	707.0
225.0	773.8	758.8	758.2	746.1	739.1	730.8	719.2	714.0	698.8	694.0
270.0	773.8	758.8	758.2	746.1	739.1	730.8	719.2	714.0	698.8	694.0
315.0	780.8	765.9	763.3	754.3	744.0	738.7	724.2	719.3	708.0	696.9
360.0	780.8	765.9	763.3	754.3	744.0	738.7	724.2	719.3	708.0	696.9

C/G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	690.8	675.4	673.2	656.8	651.5	638.2	626.1	617.7	600.1	592.5
45.0	706.8	700.1	686.4	682.0	665.3	662.5	644.8	640.3	625.3	617.6
90.0	706.8	700.1	686.4	682.0	665.3	662.5	644.8	640.3	625.3	617.6
135.0	701.3	685.9	679.4	666.9	655.6	649.4	631.7	628.6	610.2	605.5
180.0	701.3	685.9	679.4	666.9	655.6	649.4	631.7	628.6	610.2	605.5
225.0	681.2	672.5	661.1	647.4	643.0	622.9	622.0	602.5	598.6	581.5
270.0	681.2	672.5	661.1	647.4	643.0	622.9	622.0	602.5	598.6	581.5
315.0	690.8	675.4	673.2	656.8	651.5	638.2	626.1	617.7	600.1	592.5
360.0	690.8	675.4	673.2	656.8	651.5	638.2	626.1	617.7	600.1	592.5

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	578.1	566.7	556.5	539.1	534.4	513.8	509.1	489.0	482.2	465.1
45.0	604.7	592.3	582.7	566.7	558.4	541.1	532.9	516.6	505.9	492.6
90.0	604.7	592.3	582.7	566.7	558.4	541.1	532.9	516.6	505.9	492.6
135.0	590.6	578.6	568.4	552.1	544.3	528.2	514.6	506.1	486.8	481.3
180.0	590.6	578.6	568.4	552.1	544.3	528.2	514.6	506.1	486.8	481.3
225.0	572.0	560.4	544.4	535.8	518.5	509.2	493.2	481.3	468.9	452.3
270.0	572.0	560.4	544.4	535.8	518.5	509.2	493.2	481.3	468.9	452.3
315.0	578.1	566.7	556.5	539.1	534.4	513.8	509.1	489.0	482.2	465.1
360.0	578.1	566.7	556.5	539.1	534.4	513.8	509.1	489.0	482.2	465.1

C/G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	452.5	441.4	422.6	414.7	394.8	384.7	367.5	354.9	340.9	324.9
45.0	478.0	467.8	449.1	443.0	421.3	416.8	394.8	389.1	368.4	361.0
90.0	478.0	467.8	449.1	443.0	421.3	416.8	394.8	389.1	368.4	361.0
135.0	461.0	454.6	438.3	424.6	412.8	394.1	384.4	366.2	353.8	341.9
180.0	461.0	454.6	438.3	424.6	412.8	394.1	384.4	366.2	353.8	341.9
225.0	445.0	423.5	418.8	396.3	390.8	370.5	360.7	345.9	323.8	318.0
270.0	445.0	423.5	418.8	396.3	390.8	370.5	360.7	345.9	323.8	318.0
315.0	452.5	441.4	422.6	414.7	394.8	384.7	367.5	354.9	340.9	324.9
360.0	452.5	441.4	422.6	414.7	394.8	384.7	367.5	354.9	340.9	324.9

C/G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	316.5	294.7	284.1	266.3	252.8	237.7	220.0	208.4	187.0	177.6
45.0	342.0	329.1	314.5	299.6	287.8	269.3	258.3	236.0	230.0	211.0
90.0	342.0	329.1	314.5	299.6	287.8	269.3	258.3	236.0	230.0	211.0
135.0	321.4	315.8	293.3	287.1	267.4	254.7	241.8	221.7	212.6	193.8
180.0	321.4	315.8	293.3	287.1	267.4	254.7	241.8	221.7	212.6	193.8
225.0	295.5	288.8	269.3	256.7	242.9	225.4	214.0	194.5	183.9	167.4
270.0	295.5	288.8	269.3	256.7	242.9	225.4	214.0	194.5	183.9	167.4
315.0	316.5	294.7	284.1	266.3	252.8	237.7	220.0	208.4	187.0	177.6
360.0	316.5	294.7	284.1	266.3	252.8	237.7	220.0	208.4	187.0	177.6

C/G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	153.9	145.4	122.6	114.5	92.6	82.3	65.3	54.2	44.4	31.6
45.0	200.0	180.7	169.7	153.6	140.1	126.0	110.2	100.2	83.0	75.4
90.0	200.0	180.7	169.7	153.6	140.1	126.0	110.2	100.2	83.0	75.4
135.0	179.8	164.2	144.6	132.7	112.3	98.3	84.9	66.9	60.8	43.1
180.0	179.8	164.2	144.6	132.7	112.3	98.3	84.9	66.9	60.8	43.1
225.0	151.8	141.5	120.7	115.4	93.6	88.1	70.8	61.8	52.0	38.8
270.0	151.8	141.5	120.7	115.4	93.6	88.1	70.8	61.8	52.0	38.8
315.0	153.9	145.4	122.6	114.5	92.6	82.3	65.3	54.2	44.4	31.6
360.0	153.9	145.4	122.6	114.5	92.6	82.3	65.3	54.2	44.4	31.6

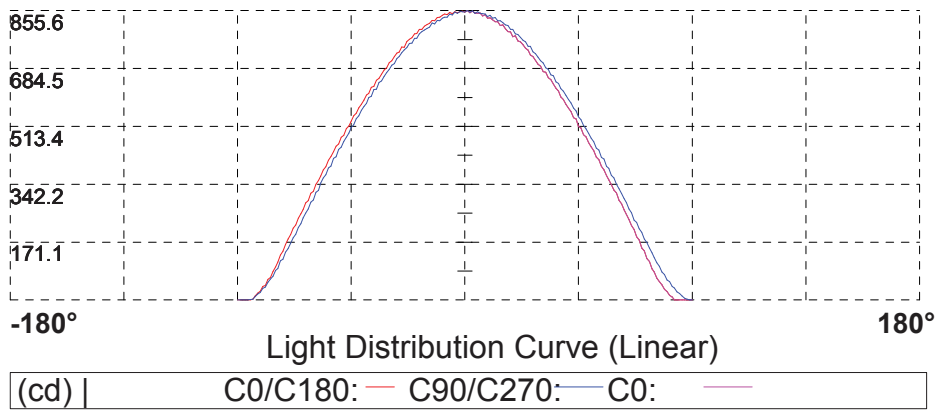
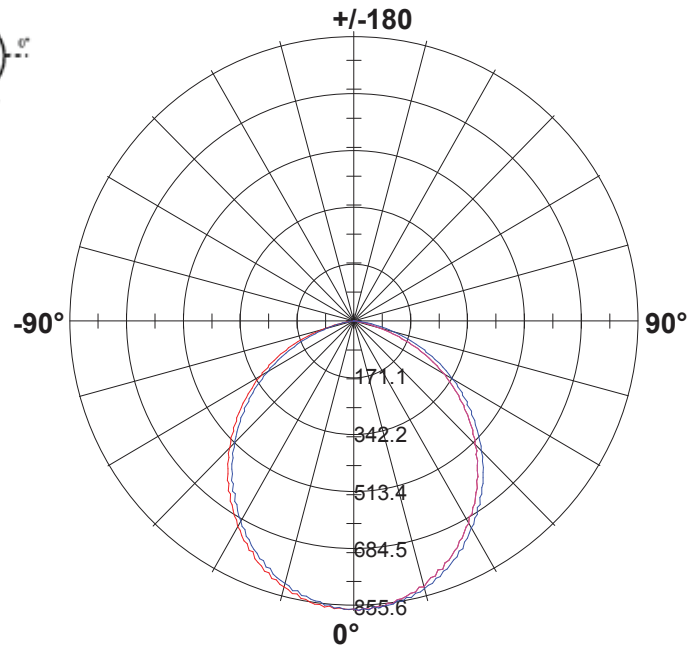
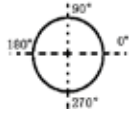
Photometric Data Table [cd]

C/G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	25.0	13.8	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45.0	59.5	54.2	40.5	35.2	24.0	19.1	11.3	5.1	1.9	0.0
90.0	59.5	54.2	40.5	35.2	24.0	19.1	11.3	5.1	1.9	0.0
135.0	40.1	26.1	20.6	12.1	2.2	0.0	0.0	0.0	0.0	0.0
180.0	40.1	26.1	20.6	12.1	2.2	0.0	0.0	0.0	0.0	0.0
225.0	34.2	22.0	17.6	10.4	2.5	1.1	0.0	0.0	0.0	0.0
270.0	34.2	22.0	17.6	10.4	2.5	1.1	0.0	0.0	0.0	0.0
315.0	25.0	13.8	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
360.0	25.0	13.8	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

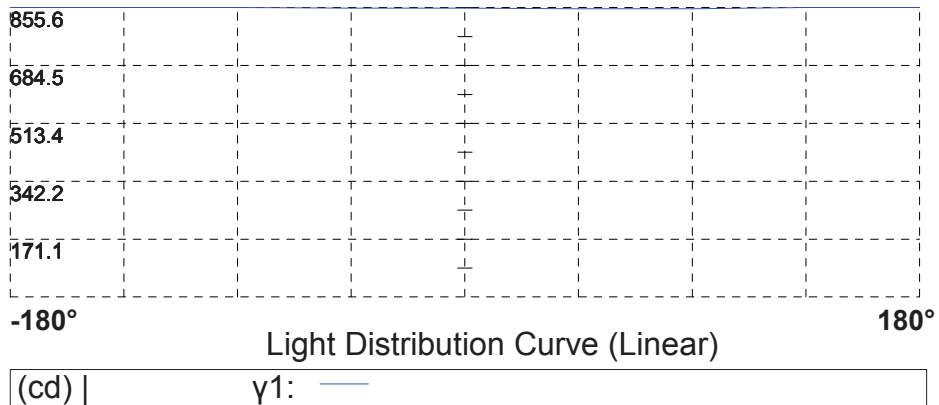
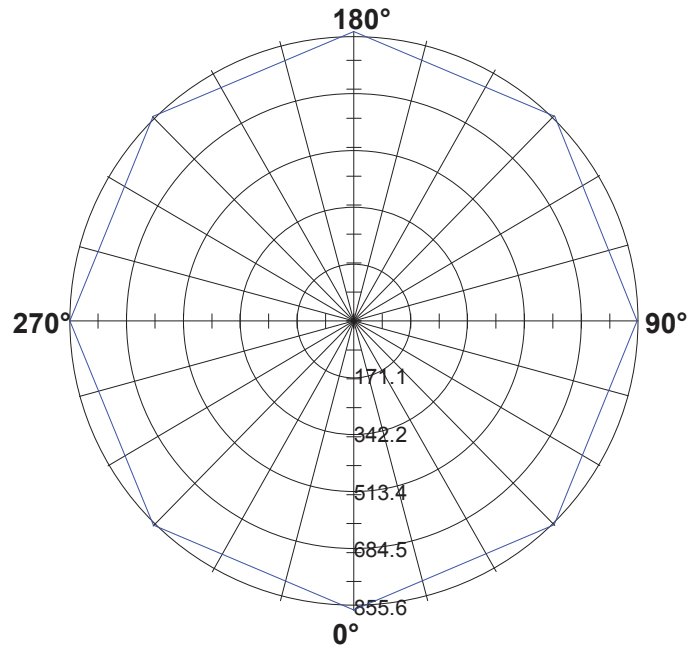
C/G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

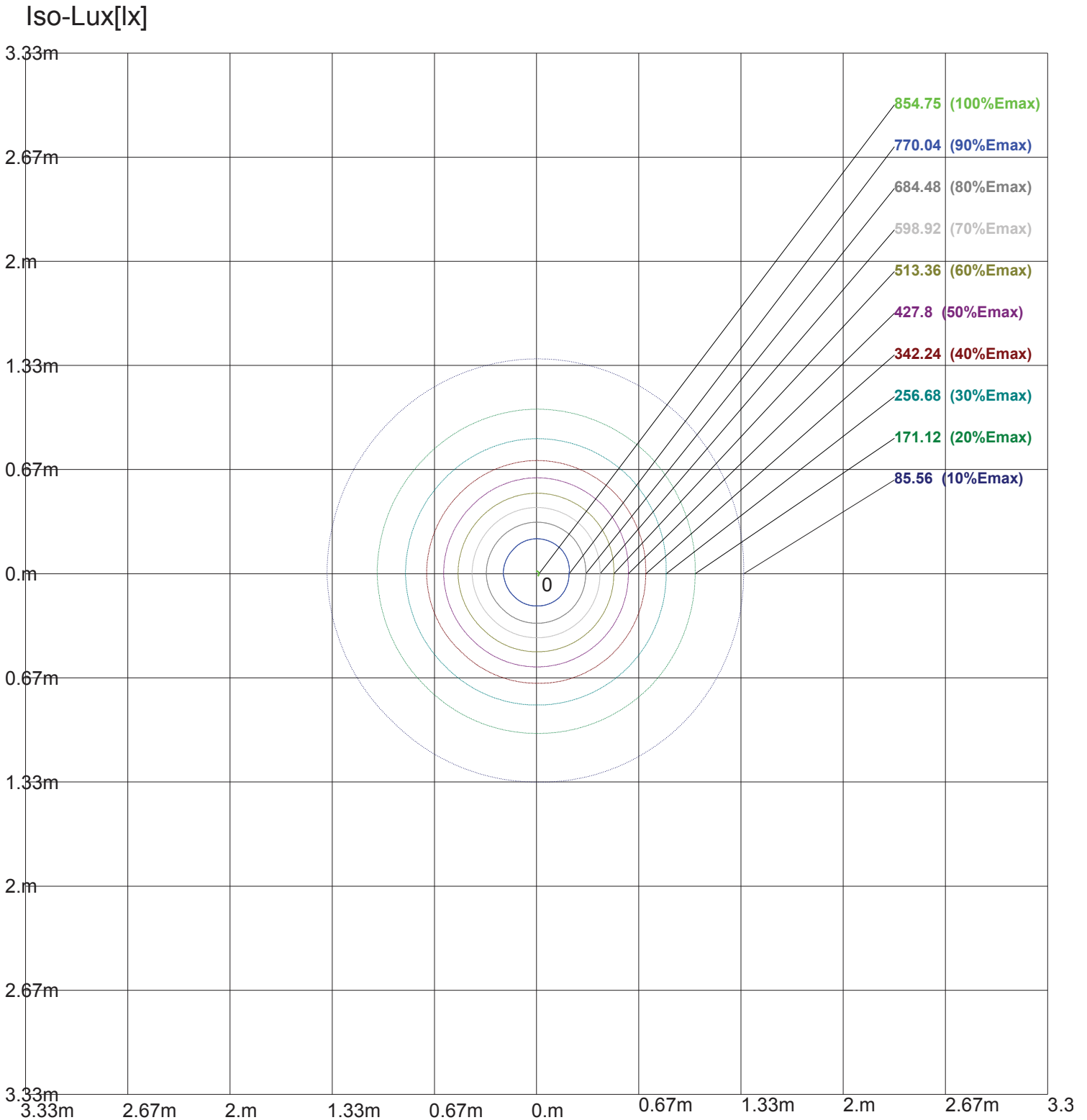
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 855.6lx

Luminance Limiting Curve

Diameter: 200mm

Length: mm

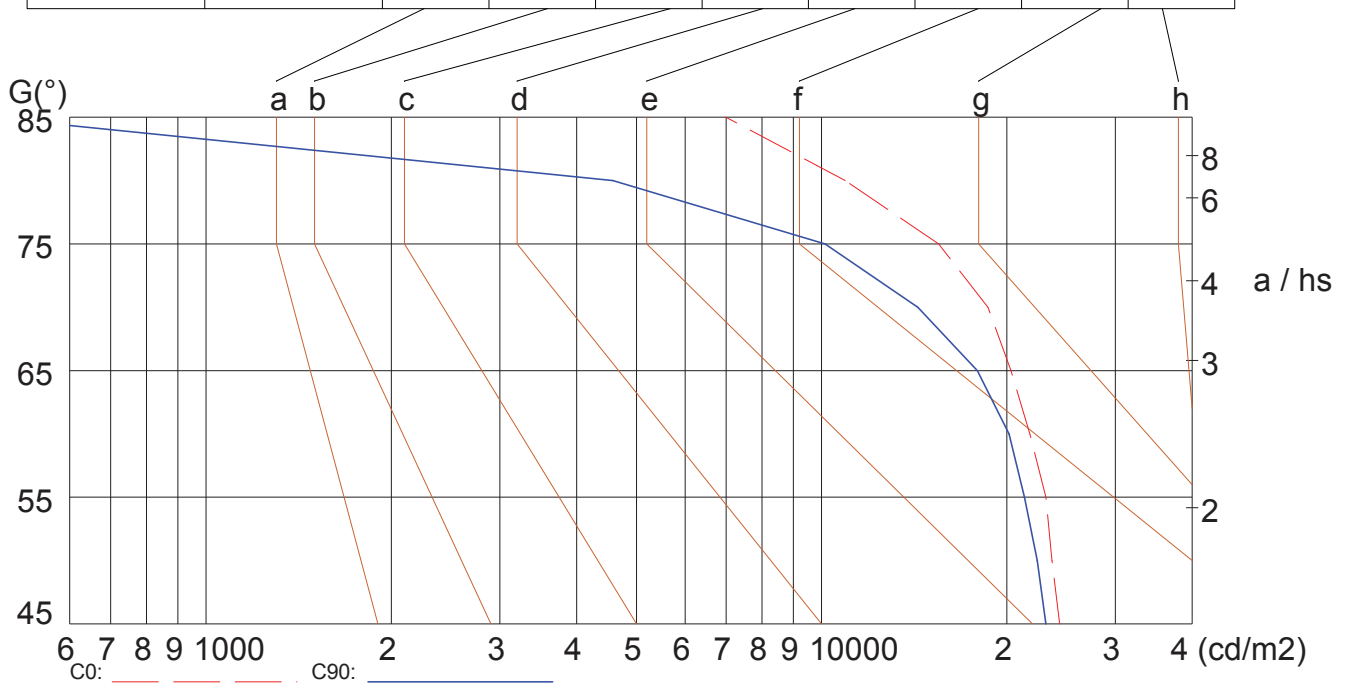
Width: mm

Height: mm

(cd/m²)

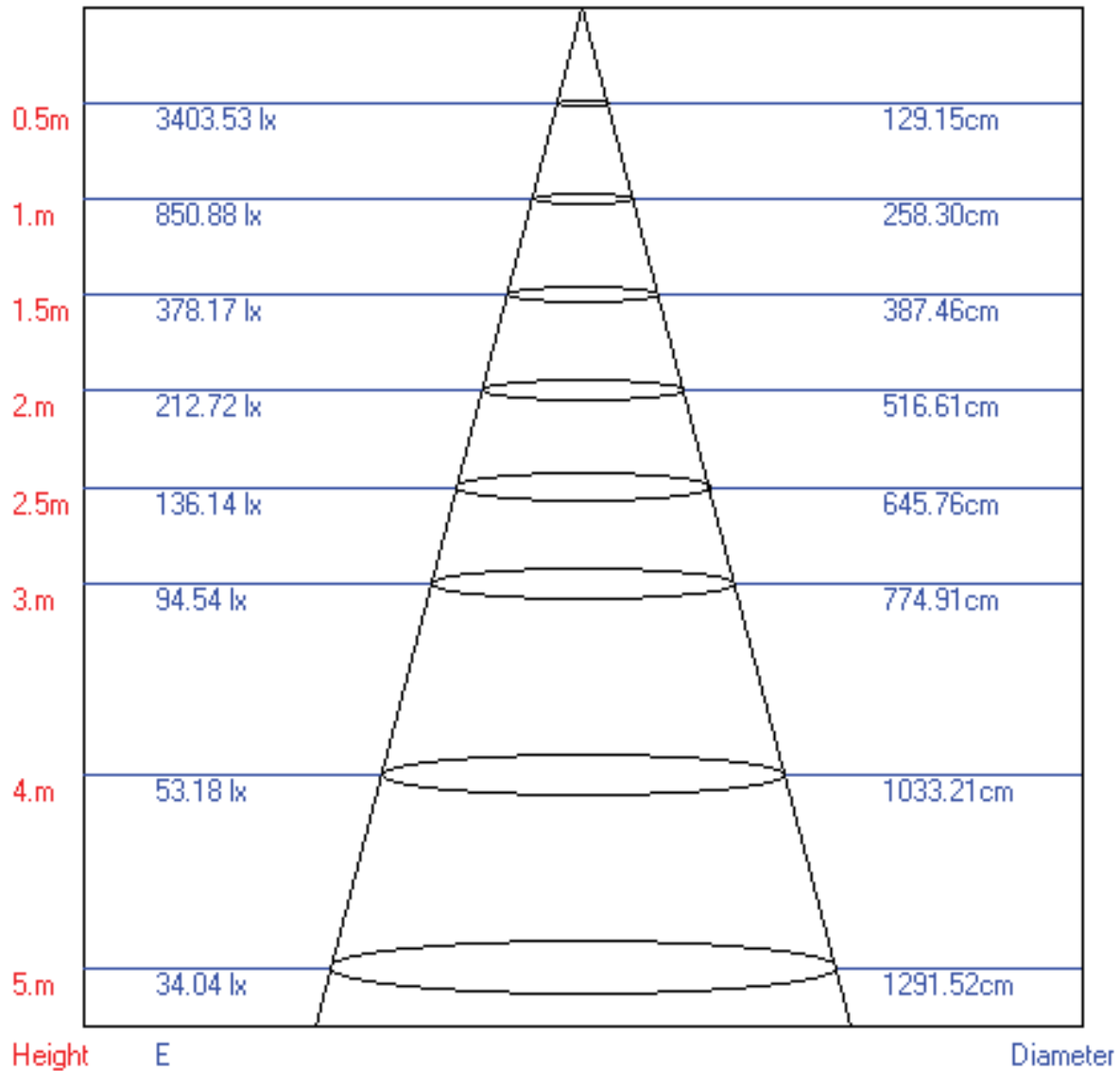
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	24372	23682	23141	21784	20295	18627	15500	10920	
C90	23141	22421	21361	20162	17915	14326	10125	4580	

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: 104.50°

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
RCR	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	1.06	1.05	1.03	1.05	1.03	1.02	1.01	0.99	0.97	0.96	0.94	0.92	0.90	0.88	0.86	0.80
2	0.91	0.89	0.87	0.91	0.88	0.86	0.88	0.85	0.82	0.85	0.81	0.78	0.80	0.76	0.73	0.68
3	0.79	0.76	0.74	0.79	0.75	0.73	0.77	0.73	0.70	0.75	0.70	0.66	0.71	0.66	0.62	0.58
4	0.68	0.66	0.64	0.69	0.65	0.62	0.68	0.63	0.60	0.66	0.61	0.57	0.64	0.58	0.54	0.50
5	0.60	0.57	0.55	0.60	0.57	0.54	0.60	0.56	0.52	0.60	0.54	0.50	0.58	0.52	0.47	0.43
6	0.53	0.50	0.49	0.54	0.50	0.48	0.54	0.49	0.46	0.54	0.48	0.44	0.53	0.47	0.41	0.38
7	0.47	0.45	0.43	0.48	0.45	0.42	0.49	0.44	0.41	0.49	0.43	0.39	0.49	0.42	0.37	0.34
8	0.43	0.40	0.39	0.43	0.40	0.38	0.44	0.40	0.36	0.45	0.39	0.35	0.45	0.38	0.33	0.30
9	0.39	0.36	0.35	0.39	0.36	0.34	0.41	0.36	0.33	0.41	0.36	0.31	0.42	0.35	0.30	0.27
10	0.35	0.33	0.32	0.36	0.33	0.31	0.37	0.33	0.30	0.38	0.33	0.29	0.39	0.32	0.27	0.25

