



# R34 series

R34-189S

# 18w



SIRIM  
 CERTIFIED TO: IEC 40598-1: 2017  
 IEC 40598-2-2: 2011  
 CERTIFICATION NO: PC011267

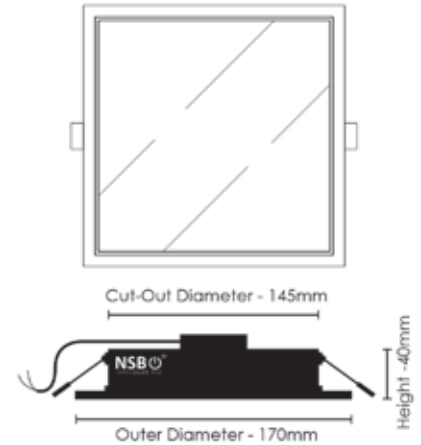


## R34-189S-18W

**Type** Indoor Recessed Downlight  
**Housing Color** White  
**Material** Nylon+PC+Glass

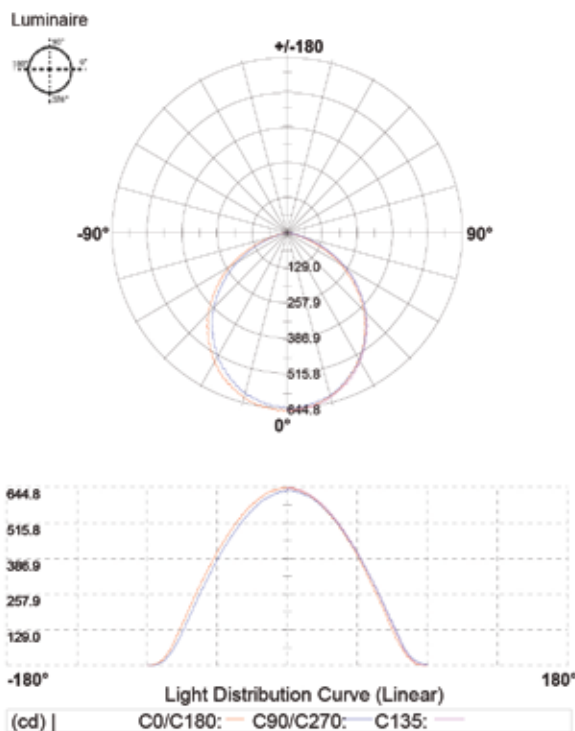
**Power Factor**  $\geq 0.95$   
**Power Efficiency** 98lm/W  
**Voltage Input** 180 - 240V 50/60Hz  
**Surge Protector** 2.5kv

**Beam Angle** 120+- Degree  
**CRI**  $\geq 85$   
**LED Model** 2835  
**Lumen 6000K** 1750lm  
**Lumen 4000K** 1750lm  
**Lumen 3000K** 1740lm  
**Lumen 3C** 1750lm  
**Life Span** 30,000 hours



BLUE LIGHT PROTECTED	FLICKER FREE	NO ULTRAVIOLET	CRI 85	PF 0.95	ENERGY SAVING	LONG LIFE SPAN	IP20	SIRIM APPROVED	EDISON LED
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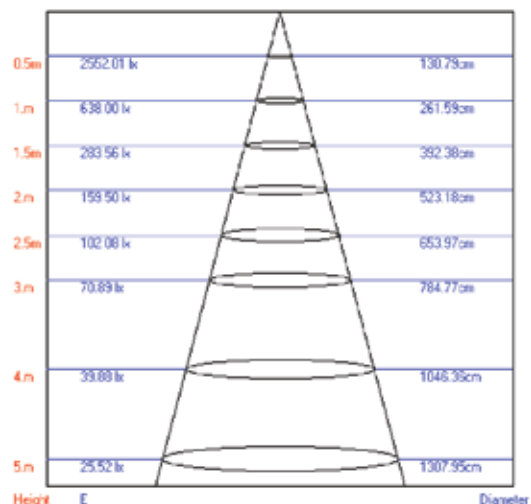
### Luminous Intensity Distribution Curve :



### Light Temperature :



### LUX Distance Diagram :



Beam Angle: 105.20°

## Luminaire Property

Luminaire:

Report NO.:R34-189S

Test NO.:

Lamp:

Sum Lumens: 1594.04 lm

Number of Lamps: 1

Diameter: 200mm

Length: mm

Photometric Type: Type C

Voltage: 220.6 V

Current: 0.082 A

Power: 16.0 W

Power Factor: 0.884

Ballast Type:

Width: mm

Height: mm

Remark:

## Photometric Results

Lumens: 1594.04 lm

Efficiency: 97.1976 lm/W

Central Intensity: 638.003cd

Maximum Intensity: 644.78cd

Beam Angle(10%): Left: -74.4 Right:73.4

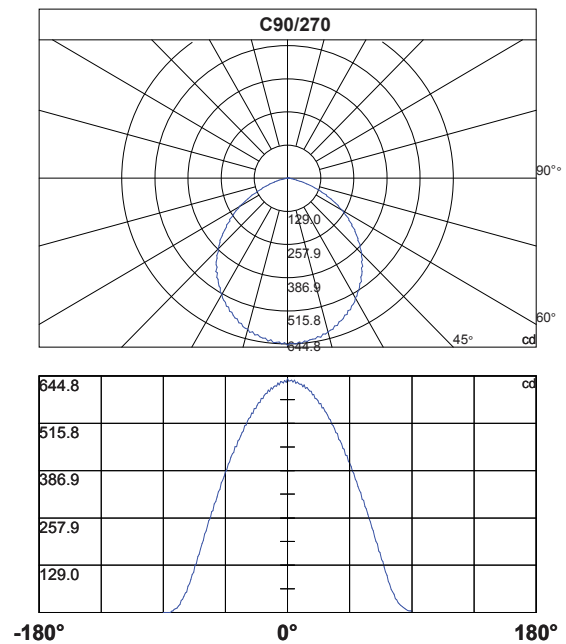
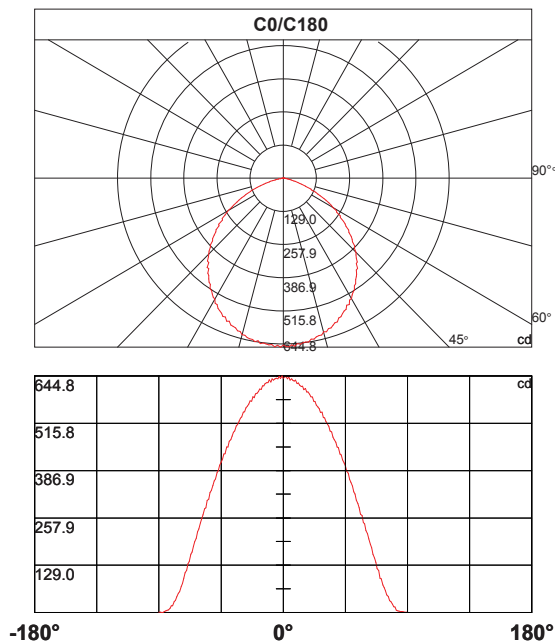
Angle of maximum intensity: C:135.0 G:1.0

Half Peak Side Angle(50%): Left: -53.0 Right:52.2

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	638.0	642.4	643.7	637.2	642.6	633.6	637.5	632.5	630.9	633.8
45.0	638.0	630.9	632.2	633.3	628.3	633.3	624.7	628.4	623.7	622.3
90.0	638.0	630.9	632.2	633.3	628.3	633.3	624.7	628.4	623.7	622.3
135.0	638.0	644.8	637.7	644.4	636.9	639.3	636.9	633.4	637.2	628.1
180.0	638.0	644.8	637.7	644.4	636.9	639.3	636.9	633.4	637.2	628.1
225.0	638.0	627.5	633.2	626.2	628.6	629.8	620.6	626.2	617.4	618.3
270.0	638.0	627.5	633.2	626.2	628.6	629.8	620.6	626.2	617.4	618.3
315.0	638.0	642.4	643.7	637.2	642.6	633.6	637.5	632.5	630.9	633.8
360.0	638.0	642.4	643.7	637.2	642.6	633.6	637.5	632.5	630.9	633.8

C/G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	624.2	626.1	619.9	616.5	617.0	607.4	610.7	601.0	601.1	594.8
45.0	622.6	615.4	620.2	611.1	614.0	607.8	603.7	602.8	593.2	594.6
90.0	622.6	615.4	620.2	611.1	614.0	607.8	603.7	602.8	593.2	594.6
135.0	634.1	626.7	626.8	624.2	617.9	617.9	608.5	609.1	601.7	598.0
180.0	634.1	626.7	626.8	624.2	617.9	617.9	608.5	609.1	601.7	598.0
225.0	615.4	609.0	612.7	602.1	606.5	597.3	596.4	592.1	583.4	583.5
270.0	615.4	609.0	612.7	602.1	606.5	597.3	596.4	592.1	583.4	583.5
315.0	624.2	626.1	619.9	616.5	617.0	607.4	610.7	601.0	601.1	594.8
360.0	624.2	626.1	619.9	616.5	617.0	607.4	610.7	601.0	601.1	594.8

C/G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	588.2	587.5	575.6	575.0	565.8	559.9	556.4	545.0	546.3	531.7
45.0	584.0	582.0	578.0	568.6	569.7	557.4	558.4	548.8	544.3	538.6
90.0	584.0	582.0	578.0	568.6	569.7	557.4	558.4	548.8	544.3	538.6
135.0	596.2	585.4	588.5	575.6	577.2	568.3	562.9	557.8	547.3	546.0
180.0	596.2	585.4	588.5	575.6	577.2	568.3	562.9	557.8	547.3	546.0
225.0	572.2	571.7	564.5	556.4	555.9	542.8	543.8	532.2	528.8	521.7
270.0	572.2	571.7	564.5	556.4	555.9	542.8	543.8	532.2	528.8	521.7
315.0	588.2	587.5	575.6	575.0	565.8	559.9	556.4	545.0	546.3	531.7
360.0	588.2	587.5	575.6	575.0	565.8	559.9	556.4	545.0	546.3	531.7

C/G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	530.9	520.6	513.3	508.0	494.5	492.0	478.1	471.4	464.1	450.8
45.0	527.6	525.1	513.7	509.1	501.1	490.4	488.1	472.5	469.2	459.6
90.0	527.6	525.1	513.7	509.1	501.1	490.4	488.1	472.5	469.2	459.6
135.0	532.9	529.9	521.9	512.1	509.1	495.1	491.3	480.8	471.1	467.0
180.0	532.9	529.9	521.9	512.1	509.1	495.1	491.3	480.8	471.1	467.0
225.0	511.3	508.8	494.5	490.4	481.9	470.9	468.1	452.3	452.3	436.4
270.0	511.3	508.8	494.5	490.4	481.9	470.9	468.1	452.3	452.3	436.4
315.0	530.9	520.6	513.3	508.0	494.5	492.0	478.1	471.4	464.1	450.8
360.0	530.9	520.6	513.3	508.0	494.5	492.0	478.1	471.4	464.1	450.8

**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	449.4	432.3	429.9	416.6	407.2	399.7	384.6	379.2	363.0	355.0
45.0	448.0	445.5	429.0	427.6	412.8	408.1	398.2	384.9	379.7	363.0
90.0	448.0	445.5	429.0	427.6	412.8	408.1	398.2	384.9	379.7	363.0
135.0	451.1	450.8	433.1	432.3	418.2	410.2	401.3	387.1	381.4	364.3
180.0	451.1	450.8	433.1	432.3	418.2	410.2	401.3	387.1	381.4	364.3
225.0	432.6	423.0	410.2	405.0	388.5	382.8	370.6	359.5	353.3	336.0
270.0	432.6	423.0	410.2	405.0	388.5	382.8	370.6	359.5	353.3	336.0
315.0	449.4	432.3	429.9	416.6	407.2	399.7	384.6	379.2	363.0	355.0
360.0	449.4	432.3	429.9	416.6	407.2	399.7	384.6	379.2	363.0	355.0

C/G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	345.1	328.5	322.5	306.2	296.7	285.9	268.3	264.7	245.1	241.2
45.0	357.2	343.7	332.4	326.6	308.5	305.9	288.6	283.0	268.2	255.6
90.0	357.2	343.7	332.4	326.6	308.5	305.9	288.6	283.0	268.2	255.6
135.0	358.5	346.1	332.6	326.9	308.7	305.9	285.7	282.7	265.8	256.1
180.0	358.5	346.1	332.6	326.9	308.7	305.9	285.7	282.7	265.8	256.1
225.0	328.5	315.3	303.1	296.0	277.9	275.1	257.1	250.1	236.3	222.0
270.0	328.5	315.3	303.1	296.0	277.9	275.1	257.1	250.1	236.3	222.0
315.0	345.1	328.5	322.5	306.2	296.7	285.9	268.3	264.7	245.1	241.2
360.0	345.1	328.5	322.5	306.2	296.7	285.9	268.3	264.7	245.1	241.2

C/G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	223.3	214.4	201.2	185.8	176.8	158.7	147.9	136.5	119.4	114.5
45.0	247.1	230.0	222.2	207.1	194.9	186.4	167.6	163.6	144.3	138.6
90.0	247.1	230.0	222.2	207.1	194.9	186.4	167.6	163.6	144.3	138.6
135.0	244.8	227.7	219.5	202.9	192.7	179.8	164.7	158.4	138.3	133.1
180.0	244.8	227.7	219.5	202.9	192.7	179.8	164.7	158.4	138.3	133.1
225.0	213.7	196.1	187.0	173.2	159.4	152.3	132.7	129.2	109.9	102.7
270.0	213.7	196.1	187.0	173.2	159.4	152.3	132.7	129.2	109.9	102.7
315.0	223.3	214.4	201.2	185.8	176.8	158.7	147.9	136.5	119.4	114.5
360.0	223.3	214.4	201.2	185.8	176.8	158.7	147.9	136.5	119.4	114.5

C/G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	93.4	91.3	74.9	68.0	59.5	48.2	43.5	31.7	29.5	22.5
45.0	123.6	111.0	101.3	84.6	77.6	62.7	56.2	49.9	37.8	34.8
90.0	123.6	111.0	101.3	84.6	77.6	62.7	56.2	49.9	37.8	34.8
135.0	115.4	108.0	93.4	79.2	70.7	56.2	51.8	42.6	33.0	29.4
180.0	115.4	108.0	93.4	79.2	70.7	56.2	51.8	42.6	33.0	29.4
225.0	89.7	78.4	72.1	55.6	52.9	43.2	35.6	32.8	21.2	16.8
270.0	89.7	78.4	72.1	55.6	52.9	43.2	35.6	32.8	21.2	16.8
315.0	93.4	91.3	74.9	68.0	59.5	48.2	43.5	31.7	29.5	22.5
360.0	93.4	91.3	74.9	68.0	59.5	48.2	43.5	31.7	29.5	22.5

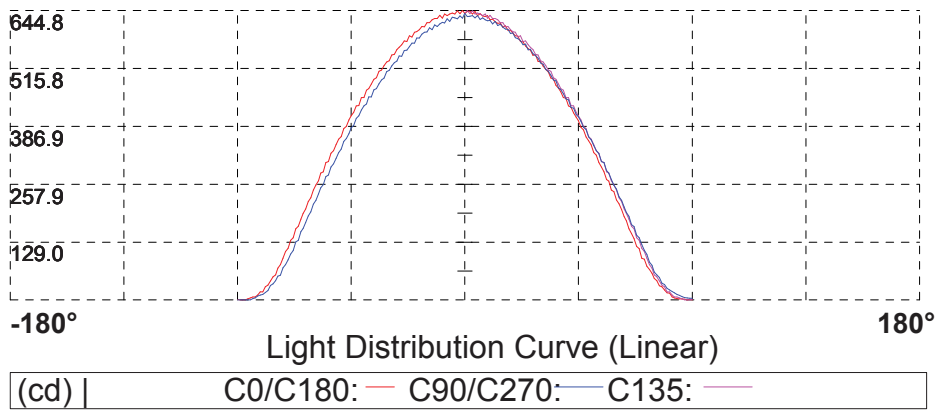
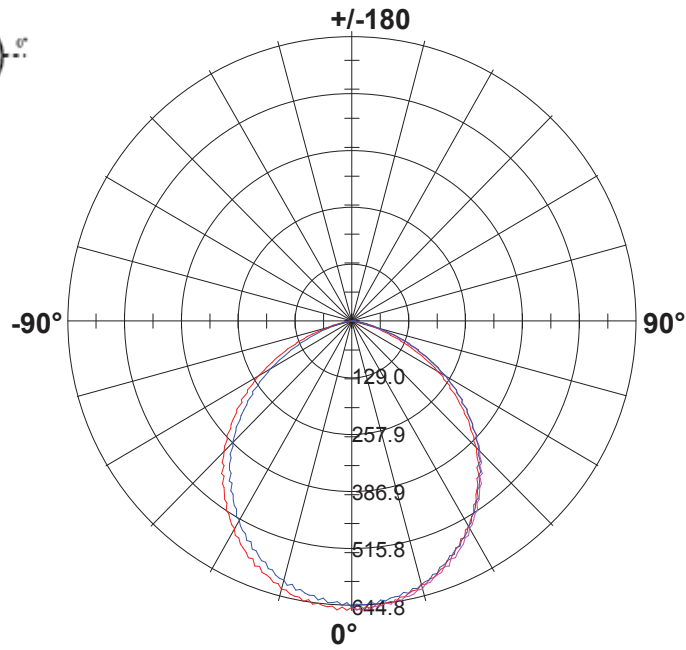
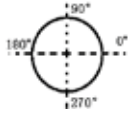
**Photometric Data Table [cd]**

<b>C/G</b>	<b>80.0</b>	<b>81.0</b>	<b>82.0</b>	<b>83.0</b>	<b>84.0</b>	<b>85.0</b>	<b>86.0</b>	<b>87.0</b>	<b>88.0</b>	<b>89.0</b>
<b>0.0</b>	15.9	15.2	6.5	4.7	3.0	2.7	2.5	1.5	0.4	0.9
<b>45.0</b>	25.9	22.6	19.0	15.9	12.7	10.1	7.4	5.1	4.6	4.1
<b>90.0</b>	25.9	22.6	19.0	15.9	12.7	10.1	7.4	5.1	4.6	4.1
<b>135.0</b>	18.5	18.1	11.1	6.9	6.6	4.5	2.4	0.0	0.0	0.5
<b>180.0</b>	18.5	18.1	11.1	6.9	6.6	4.5	2.4	0.0	0.0	0.5
<b>225.0</b>	12.4	10.7	9.1	4.5	3.3	0.0	0.0	0.0	0.0	0.0
<b>270.0</b>	12.4	10.7	9.1	4.5	3.3	0.0	0.0	0.0	0.0	0.0
<b>315.0</b>	15.9	15.2	6.5	4.7	3.0	2.7	2.5	1.5	0.4	0.9
<b>360.0</b>	15.9	15.2	6.5	4.7	3.0	2.7	2.5	1.5	0.4	0.9

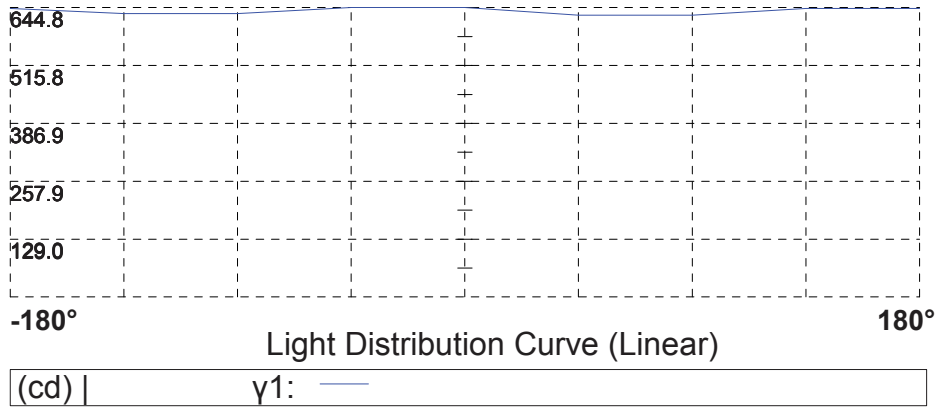
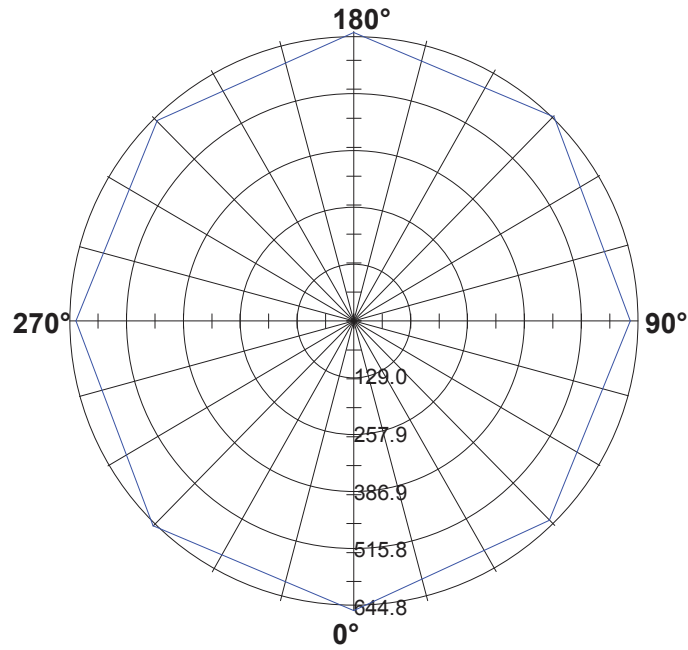
<b>C/G</b>	<b>90.0</b>
<b>0.0</b>	0.0
<b>45.0</b>	3.6
<b>90.0</b>	3.6
<b>135.0</b>	1.0
<b>180.0</b>	1.0
<b>225.0</b>	0.0
<b>270.0</b>	0.0
<b>315.0</b>	0.0
<b>360.0</b>	0.0

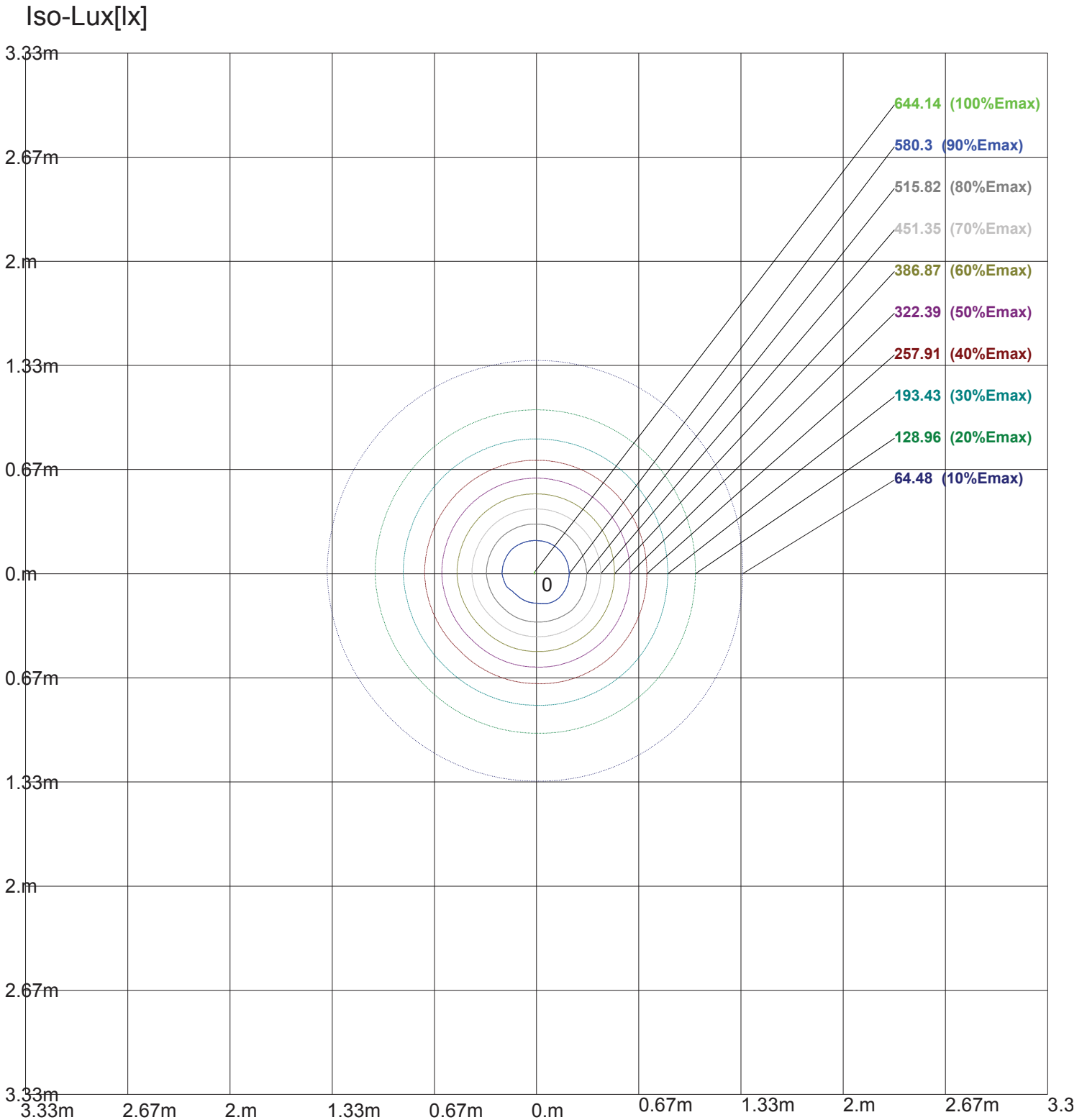
Light Distribution Curve [Unit: cd]

Luminaire



**Max Plane Light Distribution Curve [Unit: cd]**





Height: 1 m  
Max Illuminance : 644.78lx



## Luminance Limiting Curve

Diameter: 200mm

Length: mm

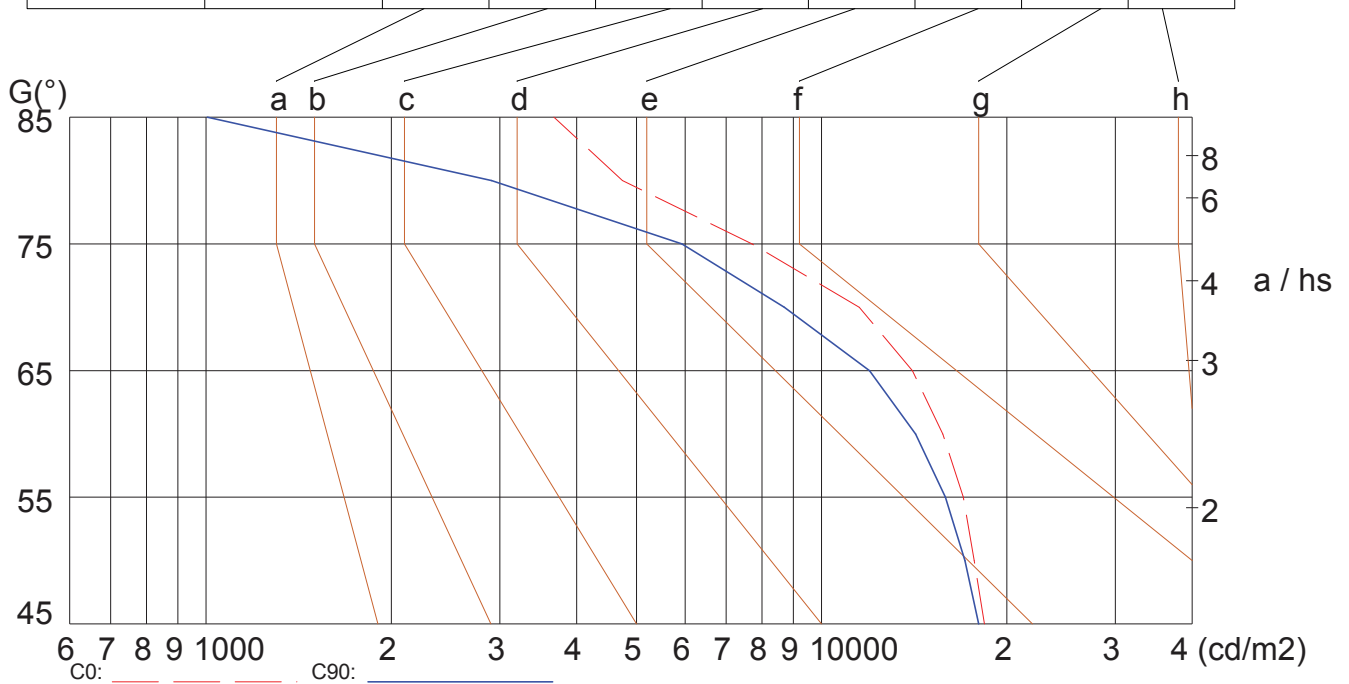
Width: mm

Height: mm

(cd/m<sup>2</sup>)

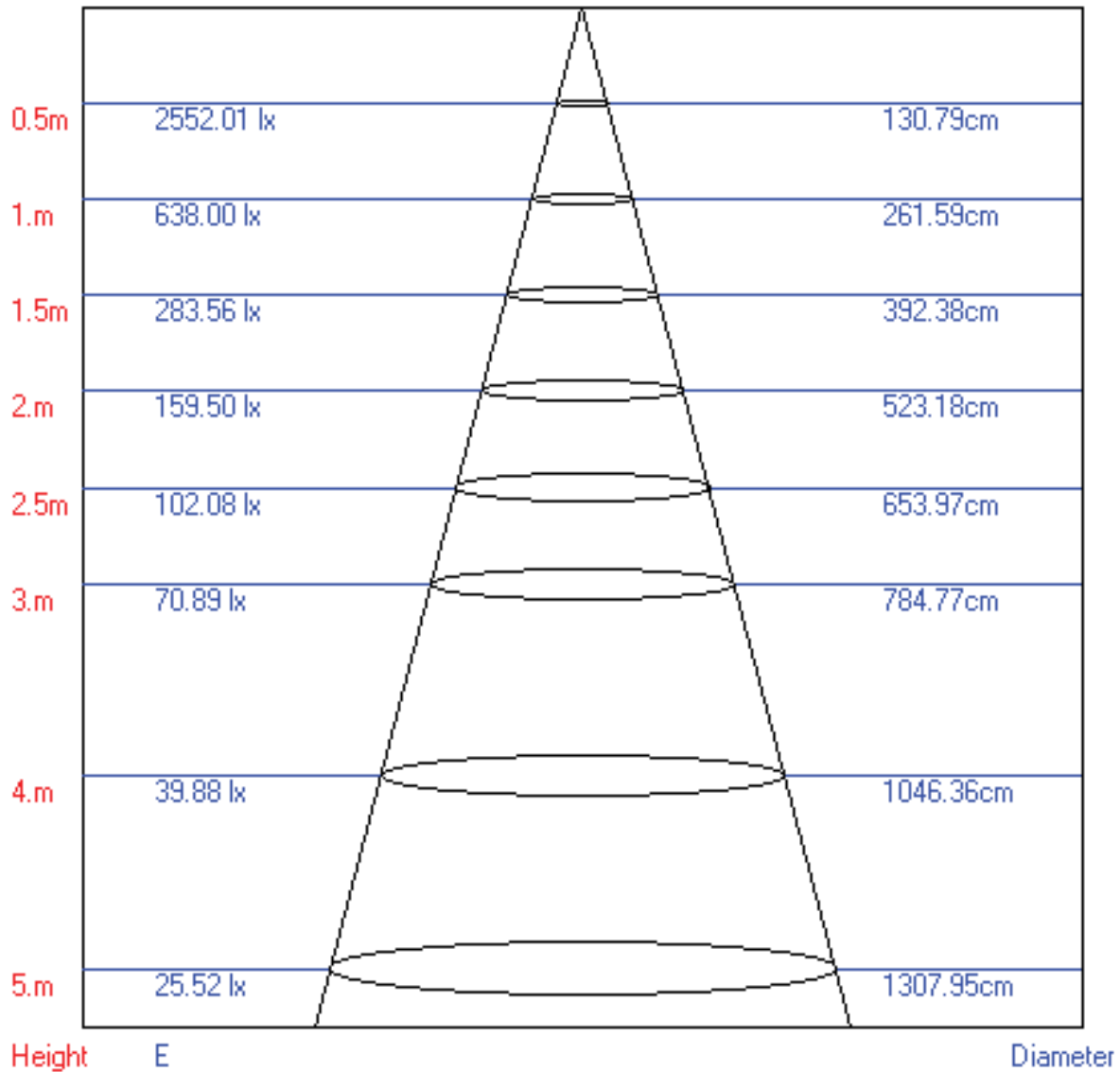
$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	18379	17699	16985	15741	14047	11509	7711	4745	3673
C90	18000	17100	15877	14221	11961	8698	5931	2908	1004

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: 105.20°

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 RHOF=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	1.07	1.05	1.04	1.06	1.04	1.02	1.02	1.00	0.98	0.97	0.95	0.93	0.90	0.88	0.86	0.81
2	0.92	0.90	0.88	0.92	0.89	0.87	0.89	0.86	0.83	0.85	0.82	0.79	0.81	0.77	0.74	0.69
3	0.80	0.77	0.75	0.80	0.76	0.74	0.78	0.74	0.71	0.76	0.71	0.67	0.72	0.67	0.63	0.59
4	0.70	0.67	0.65	0.70	0.66	0.64	0.69	0.64	0.61	0.67	0.62	0.58	0.65	0.59	0.55	0.51
5	0.61	0.58	0.57	0.61	0.58	0.55	0.61	0.57	0.53	0.61	0.55	0.51	0.59	0.53	0.48	0.44
6	0.54	0.51	0.50	0.55	0.51	0.49	0.55	0.50	0.47	0.55	0.49	0.45	0.54	0.47	0.42	0.39
7	0.48	0.46	0.44	0.49	0.46	0.43	0.50	0.45	0.42	0.50	0.44	0.40	0.49	0.43	0.38	0.34
8	0.43	0.41	0.40	0.44	0.41	0.39	0.45	0.40	0.37	0.46	0.40	0.36	0.45	0.39	0.34	0.31
9	0.39	0.37	0.36	0.40	0.37	0.35	0.41	0.37	0.34	0.42	0.36	0.32	0.42	0.36	0.31	0.28
10	0.36	0.34	0.32	0.37	0.34	0.32	0.38	0.34	0.31	0.39	0.33	0.29	0.39	0.33	0.28	0.25

