

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242779

Luminaire Tested: S125DRP-S1270D835-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S1270D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

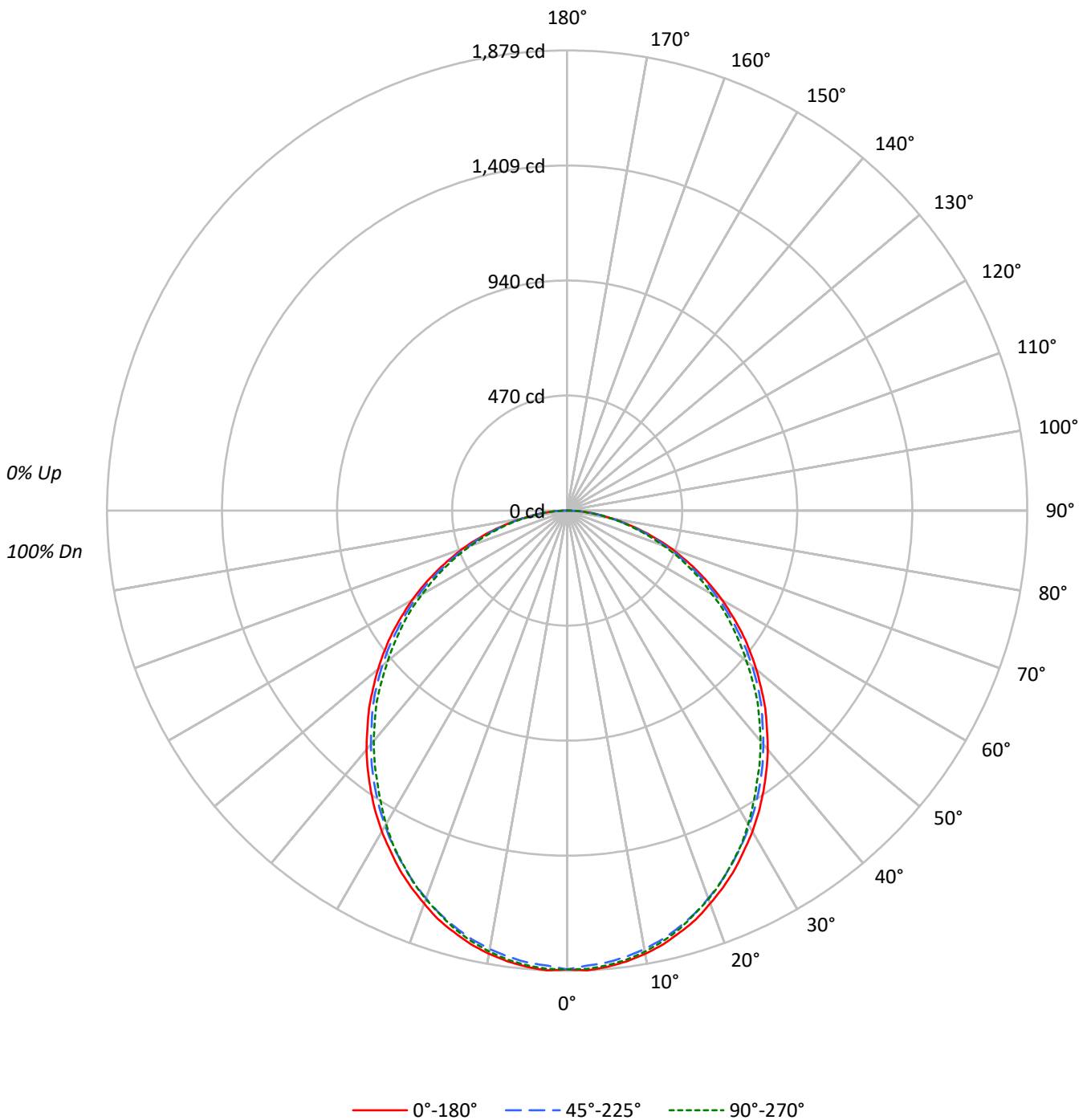
Lumens per Lamp: N/A
Luminaire Lumens: 4875.9 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13314	13314	13314
5°	13344	13217	13302
10°	13263	13124	13199
15°	13119	12966	13021
20°	12914	12745	12768
25°	12692	12483	12471
30°	12419	12199	12139
35°	12126	11895	11728
40°	11826	11564	11399
45°	11501	11262	11038
50°	11143	10898	10569
55°	10799	10487	10193
60°	10387	10070	9711
65°	9895	9571	9248
70°	9424	8994	8684
75°	8587	8301	8019
80°	7642	7523	7339
85°	6646	6768	6410

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11501 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	3.6
10°-20°	499.3	10.2
20°-30°	737.2	15.1
30°-40°	860.1	17.6
40°-50°	863.8	17.7
50°-60°	758.3	15.6
60°-70°	564.8	11.6
70°-80°	322.6	6.6
80°-90°	93.1	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1413.3	29.0
0°-40°	2273.3	46.6
0°-60°	3895.4	79.9
0°-90°	4875.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4875.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1873	1873	1873	1873	1873	
5°	1870	1867	1853	1866	1864	177
15°	1783	1778	1762	1770	1770	503
25°	1618	1611	1592	1595	1590	745
35°	1398	1392	1371	1364	1352	874
45°	1144	1138	1120	1103	1098	882
55°	872	867	846	833	823	778
65°	588	585	569	556	550	584
75°	313	310	302	298	292	333
85°	82	83	83	82	79	95
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1873.3	1873.3	1873.3	1873.3	1873.3
2.5°	1879.3	1874.8	1860.0	1874.8	1873.3
5°	1870.4	1867.4	1852.6	1865.9	1864.5
7.5°	1857.0	1854.1	1837.8	1851.1	1849.6
10°	1837.8	1834.8	1818.5	1830.4	1828.9
12.5°	1814.1	1808.1	1793.3	1802.2	1802.2
15°	1782.9	1778.5	1762.2	1769.6	1769.6
17.5°	1750.3	1742.9	1726.6	1735.5	1728.1
20°	1707.4	1704.4	1685.1	1695.5	1688.1
22.5°	1664.4	1658.4	1640.7	1646.6	1642.1
25°	1618.4	1611.0	1591.8	1594.7	1590.3
27.5°	1565.1	1560.6	1541.4	1542.8	1538.4
30°	1513.2	1508.8	1486.5	1483.6	1479.1
32.5°	1456.9	1449.5	1430.2	1424.3	1415.4
35°	1397.6	1391.7	1370.9	1363.5	1351.7
37.5°	1336.8	1329.4	1310.2	1299.8	1292.4
40°	1274.6	1267.2	1246.4	1233.1	1228.6
42.5°	1207.9	1202.0	1181.2	1169.4	1161.9
45°	1144.2	1138.2	1120.5	1102.7	1098.2
47.5°	1074.5	1076.0	1053.8	1036.0	1025.6
50°	1007.8	1003.4	985.6	966.3	955.9
52.5°	939.6	936.7	917.4	901.1	889.2
55°	871.5	867.0	846.3	832.9	822.6
57.5°	798.8	797.4	779.6	761.8	757.3
60°	730.7	724.7	708.4	693.6	683.2
62.5°	659.5	655.1	641.7	625.4	618.0
65°	588.4	585.4	569.1	555.8	549.9
67.5°	518.7	512.8	500.9	489.1	486.1
70°	453.5	446.1	432.8	423.9	417.9
72.5°	382.4	377.9	370.5	360.1	354.2
75°	312.7	309.8	302.3	297.9	292.0
77.5°	247.5	246.0	241.6	238.6	234.2
80°	186.7	186.7	183.8	182.3	179.3
82.5°	133.4	130.4	130.4	127.5	127.5
85°	81.5	83.0	83.0	81.5	78.6
87.5°	40.0	40.0	38.5	38.5	35.6
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	20.34	21.96	20.71	22.28	22.59	20.02	21.63	20.38	21.95	22.26
	3H	22.11	23.58	22.49	23.90	24.26	21.75	23.21	22.13	23.54	23.90
	4H	22.77	24.15	23.17	24.50	24.87	22.39	23.77	22.79	24.12	24.50
	6H	23.25	24.52	23.66	24.89	25.28	22.88	24.16	23.29	24.52	24.91
	8H	23.40	24.62	23.83	25.01	25.41	23.04	24.26	23.47	24.65	25.05
	12H	23.51	24.68	23.94	25.06	25.49	23.15	24.32	23.58	24.70	25.13
4H	2H	20.92	22.30	21.32	22.65	23.02	20.66	22.04	21.06	22.39	22.76
	3H	22.92	24.07	23.33	24.47	24.87	22.61	23.77	23.02	24.17	24.57
	4H	23.70	24.75	24.14	25.16	25.60	23.39	24.43	23.82	24.85	25.28
	6H	24.31	25.22	24.77	25.67	26.12	24.00	24.92	24.46	25.36	25.81
	8H	24.52	25.37	24.98	25.81	26.28	24.21	25.07	24.67	25.51	25.97
	12H	24.67	25.44	25.15	25.91	26.38	24.37	25.14	24.85	25.61	26.08
8H	4H	23.99	24.84	24.45	25.29	25.75	23.71	24.57	24.17	25.01	25.47
	6H	24.72	25.43	25.21	25.92	26.39	24.45	25.16	24.95	25.65	26.13
	8H	25.00	25.64	25.51	26.14	26.63	24.74	25.37	25.24	25.88	26.37
	12H	25.23	25.79	25.74	26.28	26.84	24.97	25.53	25.48	26.02	26.58
12H	4H	24.02	24.79	24.50	25.26	25.73	23.75	24.52	24.23	24.99	25.46
	6H	24.77	25.41	25.28	25.92	26.40	24.51	25.15	25.02	25.66	26.14
	8H	25.11	25.67	25.62	26.16	26.72	24.86	25.42	25.36	25.91	26.47