

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: P243639

Luminaire Tested: S125DRP-H1270D835-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243639
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-51)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H1270D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

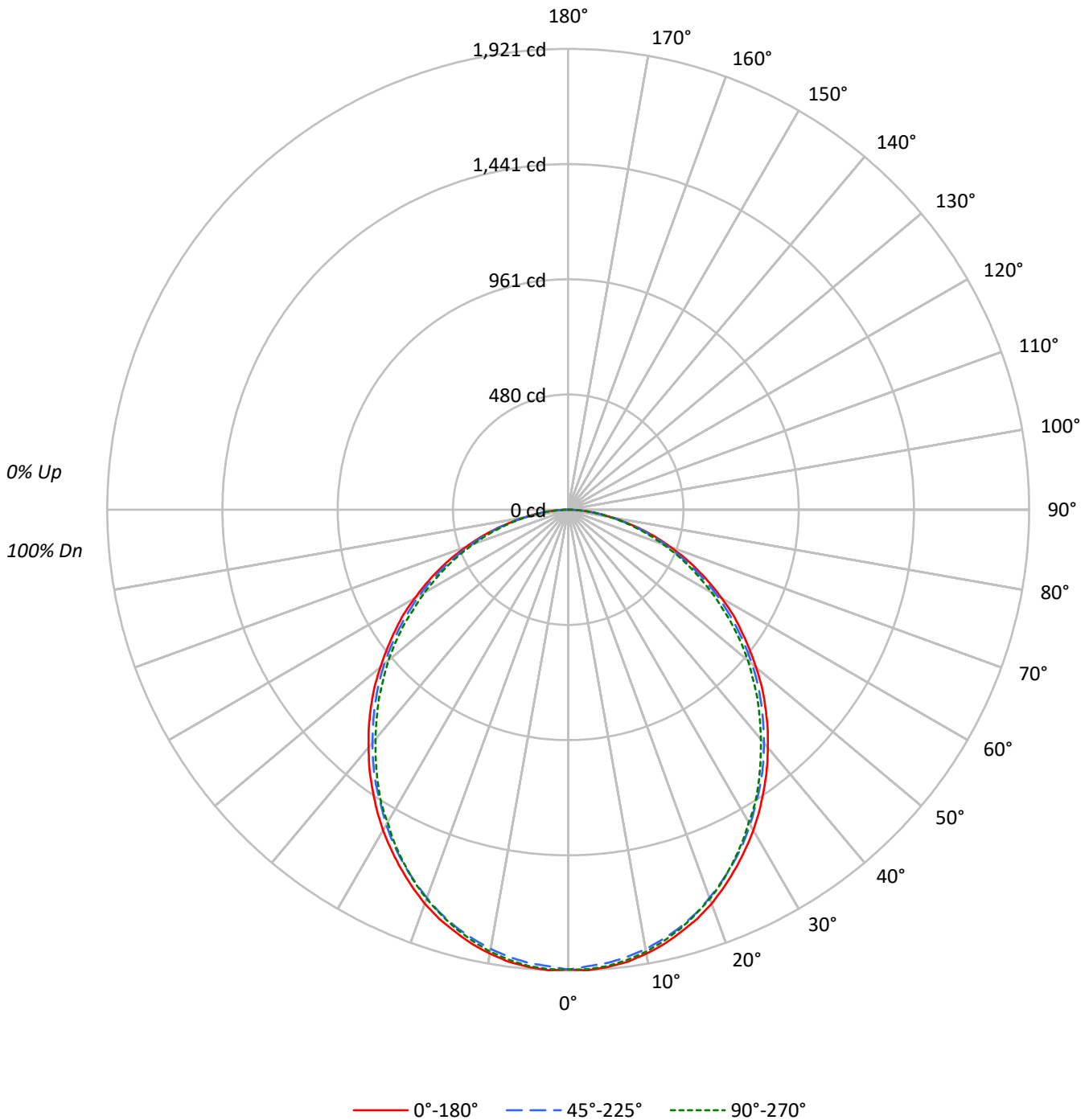
Lumens per Lamp: N/A
Luminaire Lumens: 4948.9 lumens
Efficiency: N/A
Efficacy: 131.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (Ain): 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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CATALOG NUMBER: S125DRP-H1270D835-X4F0-XX-UDD-F-W

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	95	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	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13626	13626	13626
5°	13648	13528	13618
10°	13562	13421	13502
15°	13403	13258	13300
20°	13213	13022	13054
25°	12939	12752	12729
30°	12664	12444	12352
35°	12339	12119	12009
40°	12007	11772	11589
45°	11679	11423	11211
50°	11291	11058	10809
55°	10911	10614	10336
60°	10498	10198	9838
65°	10006	9652	9320
70°	9382	9031	8740
75°	8653	8381	7997
80°	7543	7486	7310
85°	6540	6540	6198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11679 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.9	3.7
10°-20°	510.4	10.3
20°-30°	752.4	15.2
30°-40°	876.2	17.7
40°-50°	878.0	17.7
50°-60°	767.6	15.5
60°-70°	569.7	11.5
70°-80°	323.1	6.5
80°-90°	90.6	1.8
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°	1443.7	29.2
0°-40°	2319.9	46.9
0°-60°	3965.6	80.1
0°-90°	4948.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4948.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1917	1917	1917	1917	1917	
5°	1913	1910	1896	1910	1909	182
15°	1822	1819	1802	1812	1808	514
25°	1650	1644	1626	1630	1623	760
35°	1422	1414	1397	1388	1384	890
45°	1162	1159	1136	1120	1115	896
55°	880	879	857	838	834	788
65°	595	591	574	561	554	590
75°	315	310	305	300	291	334
85°	80	80	80	77	76	93
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1917.2	1917.2	1917.2	1917.2	1917.2
2.5°	1921.4	1918.6	1904.6	1918.6	1917.2
5°	1913.0	1910.2	1896.1	1910.2	1908.8
7.5°	1900.3	1896.1	1880.6	1894.7	1891.9
10°	1879.2	1876.4	1859.6	1870.8	1870.8
12.5°	1853.9	1849.7	1832.8	1842.7	1841.3
15°	1821.6	1818.8	1801.9	1811.7	1807.5
17.5°	1787.8	1780.8	1765.3	1773.7	1768.1
20°	1747.0	1741.4	1721.7	1728.7	1725.9
22.5°	1700.6	1693.6	1675.3	1679.5	1678.1
25°	1650.0	1644.3	1626.1	1630.3	1623.2
27.5°	1597.9	1590.9	1574.0	1574.0	1567.0
30°	1543.1	1536.0	1516.3	1516.3	1505.1
32.5°	1484.0	1478.4	1454.4	1453.0	1450.2
35°	1422.1	1413.7	1396.8	1388.3	1384.1
37.5°	1360.2	1353.2	1334.9	1323.6	1316.6
40°	1294.1	1289.9	1268.8	1258.9	1249.1
42.5°	1229.4	1225.2	1202.7	1185.8	1181.6
45°	1161.9	1159.1	1136.5	1119.7	1115.4
47.5°	1094.3	1091.5	1069.0	1050.7	1043.7
50°	1021.2	1021.2	1000.1	981.8	977.6
52.5°	950.9	949.5	928.4	910.1	905.9
55°	880.5	879.1	856.6	838.3	834.1
57.5°	814.4	806.0	786.3	772.2	758.2
60°	738.5	734.3	717.4	699.1	692.1
62.5°	668.1	662.5	645.6	630.2	620.3
65°	595.0	590.8	573.9	561.2	554.2
67.5°	526.1	520.4	503.6	493.7	488.1
70°	451.5	447.3	434.6	422.0	420.6
72.5°	385.4	379.8	372.8	361.5	355.9
75°	315.1	309.5	305.2	299.6	291.2
77.5°	247.6	244.8	241.9	237.7	233.5
80°	184.3	184.3	182.9	180.0	178.6
82.5°	130.8	132.2	128.0	125.2	125.2
85°	80.2	80.2	80.2	77.4	76.0
87.5°	39.4	35.2	35.2	32.4	32.4
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	20.38	22.00	20.75	22.31	22.63	20.05	21.66	20.41	21.98	22.29
	3H	22.14	23.60	22.52	23.93	24.29	21.76	23.22	22.14	23.54	23.91
	4H	22.79	24.16	23.19	24.51	24.89	22.40	23.77	22.80	24.12	24.49
	6H	23.25	24.53	23.66	24.89	25.28	22.87	24.14	23.28	24.51	24.90
	8H	23.40	24.62	23.83	25.01	25.40	23.03	24.24	23.45	24.63	25.03
	12H	23.50	24.67	23.93	25.05	25.48	23.13	24.29	23.56	24.67	25.10
4H	2H	20.96	22.33	21.35	22.68	23.05	20.69	22.06	21.09	22.41	22.79
	3H	22.94	24.09	23.35	24.48	24.88	22.62	23.77	23.03	24.17	24.57
	4H	23.71	24.75	24.14	25.17	25.60	23.39	24.43	23.82	24.84	25.28
	6H	24.30	25.21	24.76	25.65	26.11	23.99	24.90	24.44	25.34	25.79
	8H	24.50	25.35	24.96	25.79	26.26	24.19	25.04	24.65	25.48	25.95
	12H	24.65	25.41	25.13	25.89	26.36	24.33	25.10	24.81	25.57	26.04
8H	4H	24.00	24.85	24.46	25.29	25.75	23.71	24.56	24.17	25.00	25.47
	6H	24.70	25.41	25.20	25.90	26.37	24.43	25.14	24.92	25.62	26.10
	8H	24.98	25.61	25.49	26.12	26.60	24.70	25.33	25.21	25.84	26.33
	12H	25.20	25.76	25.70	26.25	26.81	24.92	25.48	25.42	25.97	26.53
12H	4H	24.02	24.79	24.50	25.26	25.73	23.74	24.51	24.22	24.98	25.45
	6H	24.75	25.39	25.26	25.90	26.38	24.49	25.12	25.00	25.63	26.11
	8H	25.08	25.64	25.59	26.14	26.70	24.82	25.38	25.32	25.87	26.43