

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: P242775

Luminaire Tested: S125DRP-S1270D830-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242775
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-S1270D830-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

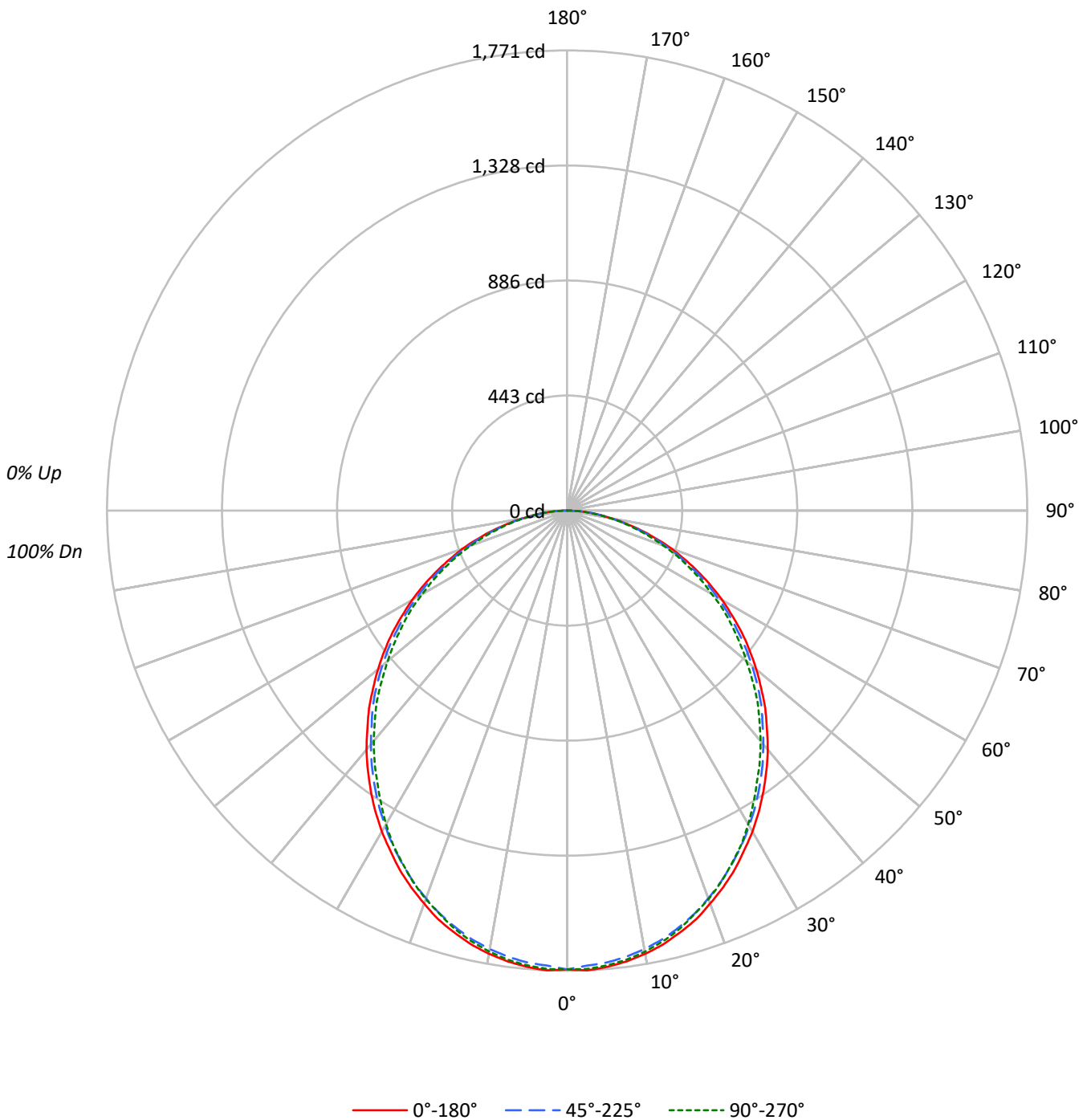
Lumens per Lamp: N/A
Luminaire Lumens: 4595.7 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12549	12549	12549
5°	12577	12458	12537
10°	12501	12370	12441
15°	12365	12221	12273
20°	12172	12013	12034
25°	11962	11765	11755
30°	11705	11499	11441
35°	11430	11212	11054
40°	11147	10900	10744
45°	10839	10615	10404
50°	10503	10272	9962
55°	10178	9883	9607
60°	9790	9491	9154
65°	9327	9021	8716
70°	8884	8476	8185
75°	8095	7826	7557
80°	7204	7089	6917
85°	6263	6377	6035

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10839 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.6	3.6
10°-20°	470.6	10.2
20°-30°	694.8	15.1
30°-40°	810.6	17.6
40°-50°	814.2	17.7
50°-60°	714.7	15.6
60°-70°	532.3	11.6
70°-80°	304.0	6.6
80°-90°	87.7	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°	1332.1	29.0
0°-40°	2142.7	46.6
0°-60°	3671.6	79.9
0°-90°	4595.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4595.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1766	1766	1766	1766	1766	
5°	1763	1760	1746	1759	1757	167
15°	1680	1676	1661	1668	1668	474
25°	1525	1518	1500	1503	1499	702
35°	1317	1312	1292	1285	1274	824
45°	1078	1073	1056	1039	1035	831
55°	821	817	798	785	775	733
65°	555	552	536	524	518	550
75°	295	292	285	281	275	314
85°	77	78	78	77	74	89
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1765.7	1765.7	1765.7	1765.7	1765.7
2.5°	1771.3	1767.1	1753.1	1767.1	1765.7
5°	1762.9	1760.1	1746.2	1758.7	1757.3
7.5°	1750.3	1747.5	1732.2	1744.8	1743.4
10°	1732.2	1729.4	1714.0	1725.2	1723.8
12.5°	1709.8	1704.2	1690.3	1698.7	1698.7
15°	1680.5	1676.3	1660.9	1667.9	1667.9
17.5°	1649.8	1642.8	1627.4	1635.8	1628.8
20°	1609.3	1606.5	1588.3	1598.1	1591.1
22.5°	1568.7	1563.2	1546.4	1552.0	1547.8
25°	1525.4	1518.5	1500.3	1503.1	1498.9
27.5°	1475.1	1471.0	1452.8	1454.2	1450.0
30°	1426.3	1422.1	1401.1	1398.3	1394.1
32.5°	1373.2	1366.2	1348.0	1342.4	1334.1
35°	1317.3	1311.7	1292.2	1285.2	1274.0
37.5°	1260.0	1253.0	1234.9	1225.1	1218.1
40°	1201.4	1194.4	1174.8	1162.2	1158.0
42.5°	1138.5	1132.9	1113.3	1102.2	1095.2
45°	1078.4	1072.8	1056.1	1039.3	1035.1
47.5°	1012.8	1014.2	993.2	976.4	966.7
50°	949.9	945.7	929.0	910.8	901.0
52.5°	885.6	882.9	864.7	849.3	838.2
55°	821.4	817.2	797.6	785.1	775.3
57.5°	752.9	751.5	734.8	718.0	713.8
60°	688.7	683.1	667.7	653.8	644.0
62.5°	621.6	617.4	604.9	589.5	582.5
65°	554.6	551.8	536.4	523.8	518.3
67.5°	488.9	483.3	472.2	461.0	458.2
70°	427.5	420.5	407.9	399.5	393.9
72.5°	360.4	356.2	349.2	339.5	333.9
75°	294.8	292.0	285.0	280.8	275.2
77.5°	233.3	231.9	227.7	224.9	220.7
80°	176.0	176.0	173.2	171.8	169.0
82.5°	125.7	122.9	122.9	120.1	120.1
85°	76.8	78.2	78.2	76.8	74.0
87.5°	37.7	37.7	36.3	36.3	33.5
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	20.14	21.76	20.50	22.07	22.38	19.81	21.43	20.18	21.74	22.06
	3H	21.91	23.37	22.28	23.70	24.06	21.54	23.01	21.92	23.33	23.69
	4H	22.56	23.94	22.96	24.29	24.67	22.19	23.57	22.59	23.91	24.29
	6H	23.04	24.32	23.45	24.68	25.07	22.68	23.95	23.09	24.32	24.71
	8H	23.20	24.42	23.62	24.81	25.20	22.84	24.06	23.26	24.44	24.84
	12H	23.30	24.47	23.73	24.85	25.28	22.95	24.11	23.38	24.50	24.92
4H	2H	20.72	22.09	21.11	22.44	22.82	20.46	21.83	20.86	22.18	22.56
	3H	22.71	23.87	23.12	24.26	24.66	22.41	23.56	22.82	23.96	24.36
	4H	23.50	24.54	23.93	24.96	25.39	23.18	24.23	23.61	24.64	25.08
	6H	24.11	25.02	24.56	25.46	25.92	23.80	24.71	24.25	25.15	25.61
	8H	24.31	25.17	24.77	25.61	26.07	24.01	24.86	24.47	25.30	25.77
	12H	24.46	25.23	24.94	25.71	26.18	24.16	24.93	24.64	25.41	25.88
8H	4H	23.79	24.64	24.25	25.08	25.55	23.51	24.36	23.97	24.80	25.27
	6H	24.51	25.22	25.01	25.71	26.19	24.25	24.96	24.74	25.45	25.92
	8H	24.79	25.43	25.30	25.94	26.42	24.53	25.17	25.04	25.67	26.16
	12H	25.02	25.59	25.53	26.08	26.64	24.76	25.33	25.27	25.82	26.38
12H	4H	23.82	24.58	24.30	25.06	25.53	23.54	24.31	24.02	24.79	25.26
	6H	24.57	25.21	25.08	25.71	26.20	24.31	24.95	24.82	25.45	25.94
	8H	24.90	25.47	25.41	25.96	26.52	24.65	25.21	25.16	25.71	26.27