

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P242878

Luminaire Tested: **S125RDR-S1270D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242878  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1270D830-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4369.8 lumens  
Efficiency: N/A  
Efficacy: 106.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct

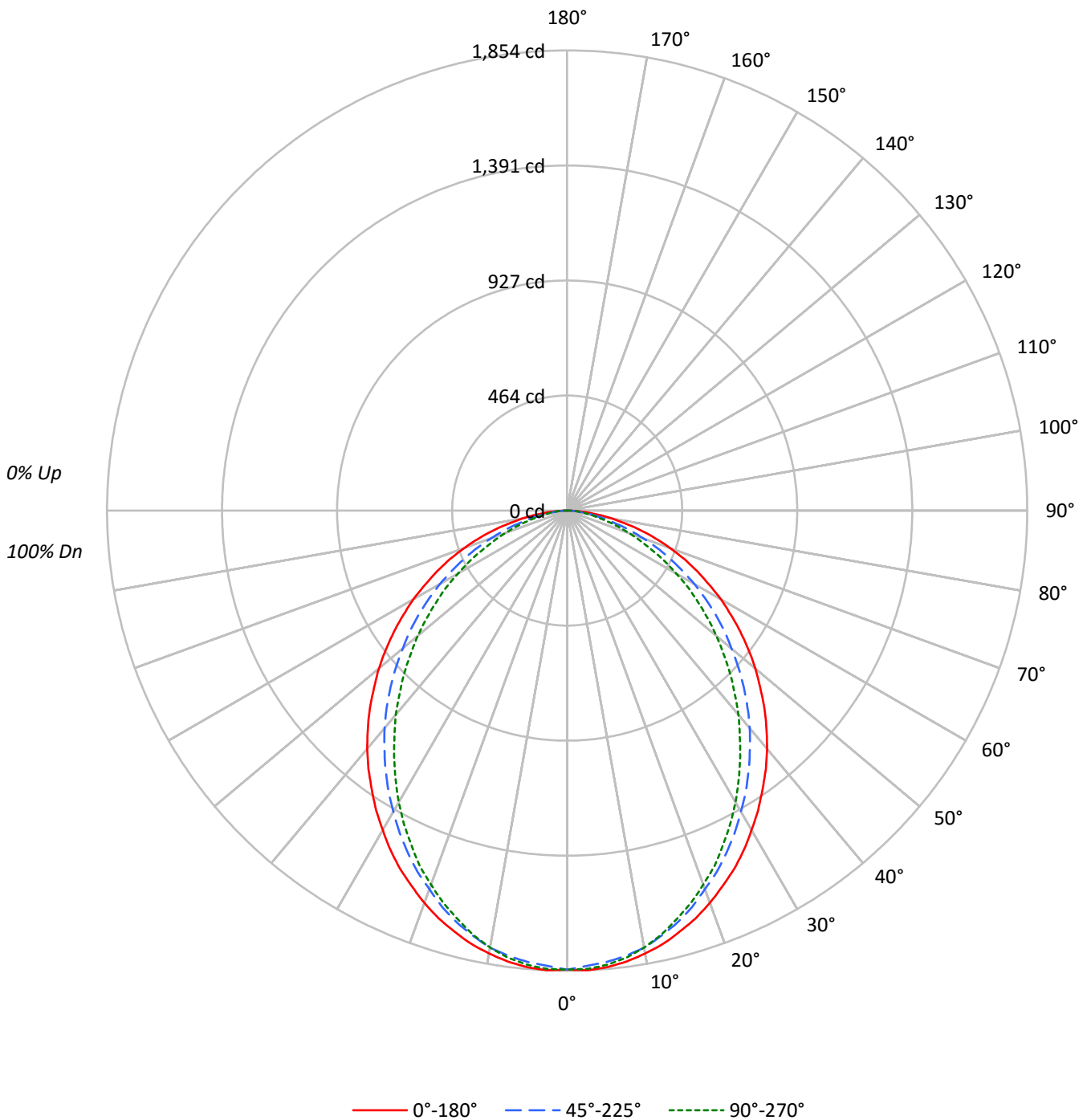
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P242878

CATALOG NUMBER: S125RDR-S1270D830-X4F0-XX-UDD-F-W

### Luminous Intensity Polar Plot





TEST NUMBER: P242878

CATALOG NUMBER: S125RDR-S1270D830-X4F0-XX-UDD-F-W

**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	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13145	13145	13145
5°	13175	13026	13106
10°	13076	12905	12905
15°	12920	12643	12540
20°	12721	12277	12130
25°	12489	11918	11656
30°	12198	11499	11132
35°	11902	11066	10545
40°	11625	10615	9966
45°	11289	10110	9338
50°	10951	9561	8681
55°	10559	9036	7980
60°	10166	8399	7228
65°	9702	7659	6367
70°	9173	6735	5486
75°	8439	5676	4564
80°	7433	4461	3831
85°	6263	3645	3417



TEST NUMBER: P242878

CATALOG NUMBER: S125RDR-S1270D830-X4F0-XX-UDD-F-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.1	4.0
10°-20°	486.5	11.1
20°-30°	705.4	16.1
30°-40°	803.6	18.4
40°-50°	783.3	17.9
50°-60°	659.2	15.1
60°-70°	461.9	10.6
70°-80°	236.8	5.4
80°-90°	59.1	1.4
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°	1365.9	31.3
0°-40°	2169.5	49.6
0°-60°	3611.9	82.7
0°-90°	4369.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4369.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1850	1850	1850	1850	1850	
5°	1847	1841	1826	1840	1837	175
15°	1756	1748	1718	1717	1704	495
25°	1592	1572	1520	1502	1486	733
35°	1372	1338	1275	1235	1215	859
45°	1123	1083	1006	950	929	866
55°	852	807	729	666	644	762
65°	577	529	455	400	379	571
75°	307	265	207	176	166	325
85°	77	52	45	43	42	89
90°	0	0	0	0	0	



TEST NUMBER: P242878

CATALOG NUMBER: S125RDR-S1270D830-X4F0-XX-UDD-F-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1849.5	1849.5	1849.5	1849.5	1849.5
2.5°	1853.7	1849.5	1835.6	1849.5	1848.1
5°	1846.7	1841.1	1825.8	1839.7	1837.0
7.5°	1832.8	1827.2	1809.0	1820.2	1817.4
10°	1811.8	1807.6	1788.1	1792.2	1788.1
12.5°	1788.1	1782.5	1754.5	1757.3	1750.3
15°	1755.9	1747.5	1718.2	1716.8	1704.2
17.5°	1722.4	1709.8	1674.9	1667.9	1658.1
20°	1681.9	1667.9	1623.2	1616.2	1603.7
22.5°	1637.2	1623.2	1575.7	1560.4	1550.6
25°	1592.5	1571.5	1519.8	1501.7	1486.3
27.5°	1542.2	1517.1	1462.6	1438.8	1423.5
30°	1486.3	1459.8	1401.1	1369.0	1356.4
32.5°	1431.8	1399.7	1339.6	1303.3	1286.6
35°	1371.8	1338.3	1275.4	1234.9	1215.3
37.5°	1314.5	1274.0	1209.7	1162.2	1142.7
40°	1253.0	1211.1	1144.1	1091.0	1074.2
42.5°	1188.8	1145.5	1075.6	1025.3	998.8
45°	1123.1	1082.6	1005.8	949.9	929.0
47.5°	1054.7	1012.8	935.9	878.7	854.9
50°	990.4	944.3	864.7	806.0	785.1
52.5°	920.6	873.1	799.0	734.8	713.8
55°	852.1	807.4	729.2	666.3	644.0
57.5°	782.3	734.8	659.3	597.9	578.3
60°	715.2	666.3	590.9	529.4	508.5
62.5°	644.0	597.9	521.1	465.2	444.2
65°	576.9	529.4	455.4	399.5	378.6
67.5°	509.9	462.4	391.1	338.1	321.3
70°	441.4	393.9	324.1	280.8	264.0
72.5°	374.4	328.3	264.0	224.9	215.1
75°	307.3	265.4	206.7	176.0	166.2
77.5°	238.9	205.3	156.5	132.7	124.3
80°	181.6	148.1	109.0	96.4	93.6
82.5°	125.7	96.4	72.6	68.4	67.1
85°	76.8	51.7	44.7	43.3	41.9
87.5°	32.1	22.4	21.0	21.0	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)