

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: P243742

Luminaire Tested: **S125RDR-H1270D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243742  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D835-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4700.3 lumens  
Efficiency: N/A  
Efficacy: 124.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct

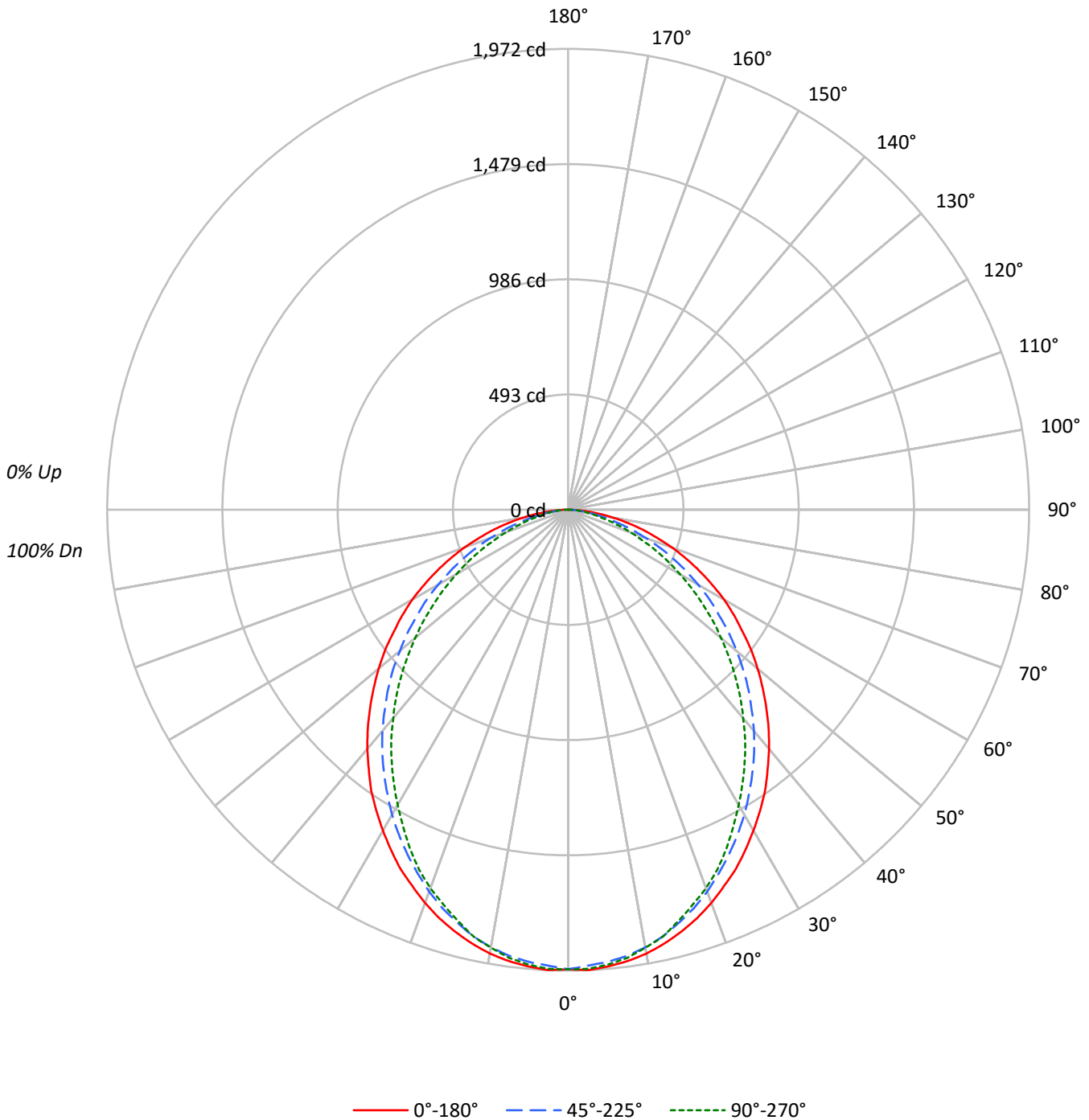
Input Watts (W): 37.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	97	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	63	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	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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

	0°	45°	90°
0°	13977	13977	13977
5°	13999	13859	13939
10°	13918	13725	13735
15°	13755	13465	13403
20°	13543	13150	13033
25°	13303	12763	12553
30°	13010	12364	11971
35°	12741	11924	11423
40°	12398	11471	10806
45°	12045	10957	10166
50°	11696	10389	9441
55°	11277	9761	8680
60°	10937	9117	7858
65°	10408	8350	6954
70°	9821	7308	5933
75°	9037	6102	4828
80°	7944	4719	3974
85°	6768	3898	3670



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.2	3.9
10°-20°	518.8	11.0
20°-30°	754.9	16.1
30°-40°	864.6	18.4
40°-50°	846.0	18.0
50°-60°	714.3	15.2
60°-70°	500.1	10.6
70°-80°	254.0	5.4
80°-90°	62.5	1.3
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°	1458.9	31.0
0°-40°	2323.5	49.4
0°-60°	3883.8	82.6
0°-90°	4700.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4700.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1966	1966	1966	1966	1966	
5°	1962	1958	1942	1955	1954	186
15°	1869	1862	1830	1829	1822	527
25°	1696	1677	1628	1611	1601	780
35°	1468	1433	1374	1334	1317	917
45°	1198	1159	1090	1032	1011	925
55°	910	871	788	724	700	817
65°	619	571	496	435	414	613
75°	329	288	222	186	176	348
85°	83	54	48	45	45	95
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1966.5	1966.5	1966.5	1966.5	1966.5
2.5°	1972.1	1967.9	1952.4	1966.5	1966.5
5°	1962.2	1958.0	1942.5	1955.2	1953.8
7.5°	1948.2	1943.9	1925.7	1938.3	1934.1
10°	1928.5	1922.8	1901.7	1908.8	1903.2
12.5°	1901.7	1896.1	1870.8	1873.6	1870.8
15°	1869.4	1862.4	1830.0	1828.6	1821.6
17.5°	1832.8	1823.0	1787.8	1783.6	1772.3
20°	1790.6	1778.0	1738.6	1730.1	1723.1
22.5°	1742.8	1730.1	1683.7	1671.1	1666.8
25°	1696.4	1676.7	1627.5	1610.6	1600.7
27.5°	1641.5	1619.0	1568.4	1545.9	1529.0
30°	1585.3	1559.9	1506.5	1476.9	1458.7
32.5°	1527.6	1498.0	1440.4	1403.8	1388.3
35°	1468.5	1433.3	1374.3	1333.5	1316.6
37.5°	1401.0	1365.8	1306.7	1258.9	1243.4
40°	1336.3	1299.7	1236.4	1184.4	1164.7
42.5°	1268.8	1230.8	1161.9	1107.0	1090.1
45°	1198.4	1159.1	1090.1	1032.5	1011.4
47.5°	1128.1	1088.7	1017.0	959.3	932.6
50°	1057.8	1015.6	939.6	880.5	853.8
52.5°	987.4	941.0	866.5	803.2	779.3
55°	910.1	870.7	787.7	724.4	700.5
57.5°	841.2	797.6	718.8	654.1	627.4
60°	769.4	721.6	641.4	578.1	552.8
62.5°	693.5	645.6	568.3	505.0	482.5
65°	618.9	571.1	496.5	434.6	413.5
67.5°	544.4	499.3	424.8	367.1	343.2
70°	472.6	426.2	351.7	299.6	285.5
72.5°	396.7	360.1	285.5	239.1	227.9
75°	329.1	288.4	222.2	185.7	175.8
77.5°	260.2	220.8	164.6	139.3	130.8
80°	194.1	160.4	115.3	99.9	97.1
82.5°	133.6	101.3	76.0	73.1	71.7
85°	83.0	53.5	47.8	45.0	45.0
87.5°	35.2	22.5	22.5	21.1	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)