

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: P243762

Luminaire Tested: **S125RDR-H1270D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243762  
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-H1270D940-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4191.3 lumens  
Efficiency: N/A  
Efficacy: 111.2 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

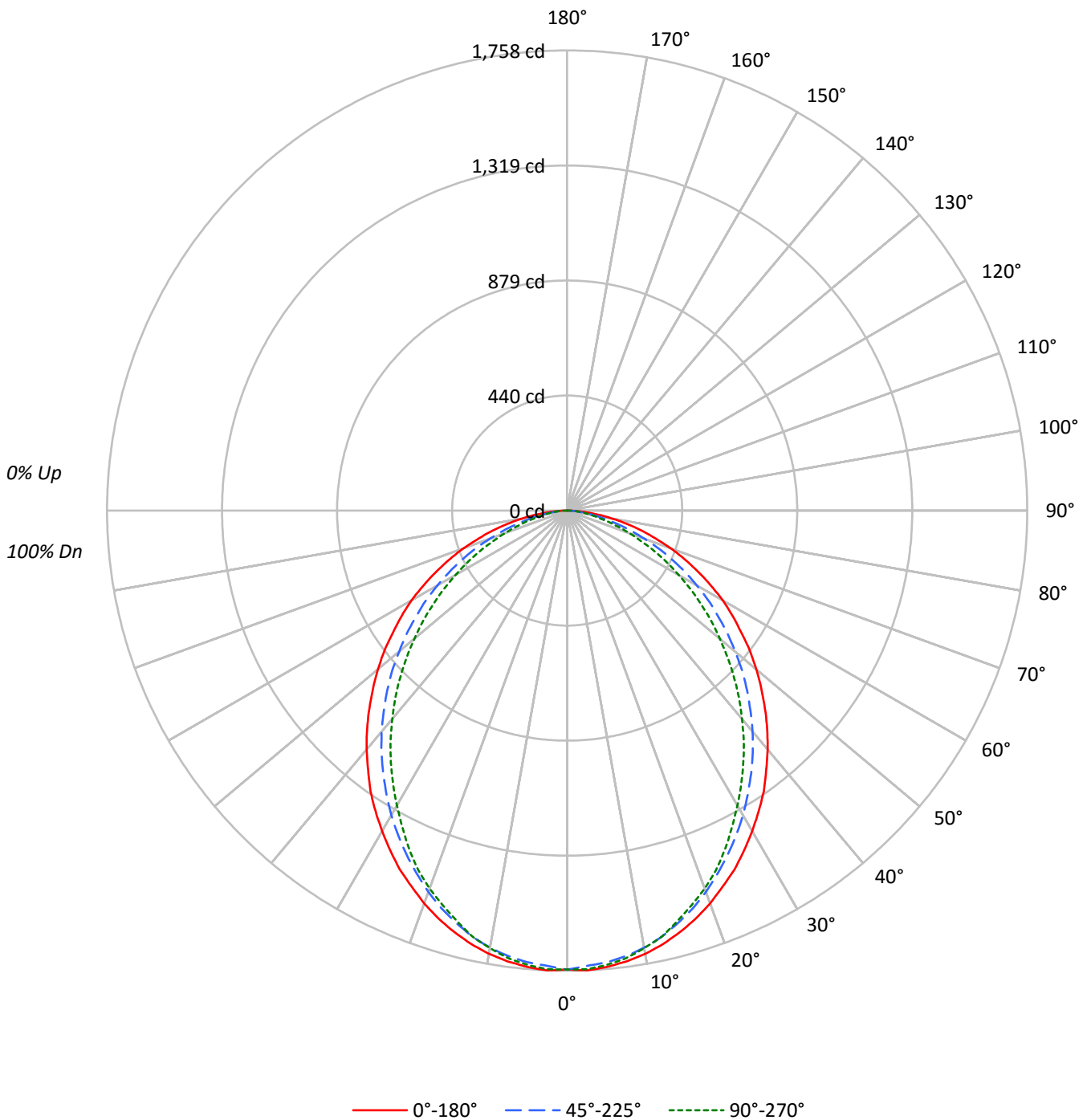
Input Watts (W): 37.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	12463	12463	12463
5°	12483	12358	12430
10°	12410	12239	12248
15°	12266	12007	11952
20°	12077	11726	11621
25°	11863	11380	11194
30°	11601	11025	10675
35°	11362	10632	10186
40°	11056	10229	9636
45°	10742	9771	9064
50°	10429	9265	8419
55°	10056	8704	7740
60°	9753	8131	7006
65°	9282	7447	6202
70°	8757	6517	5291
75°	8060	5443	4306
80°	7085	4212	3540
85°	6035	3474	3270



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.1	3.9
10°-20°	462.6	11.0
20°-30°	673.2	16.1
30°-40°	771.0	18.4
40°-50°	754.4	18.0
50°-60°	636.9	15.2
60°-70°	445.9	10.6
70°-80°	226.5	5.4
80°-90°	55.7	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°	1301.0	31.0
0°-40°	2071.9	49.4
0°-60°	3463.2	82.6
0°-90°	4191.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4191.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1754	1754	1754	1754	1754	
5°	1750	1746	1732	1744	1742	166
15°	1667	1661	1632	1631	1624	470
25°	1513	1495	1451	1436	1427	696
35°	1310	1278	1225	1189	1174	818
45°	1069	1034	972	921	902	825
55°	812	776	702	646	625	728
65°	552	509	443	388	369	547
75°	294	257	198	166	157	310
85°	74	48	43	40	40	85
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1753.5	1753.5	1753.5	1753.5	1753.5
2.5°	1758.5	1754.8	1741.0	1753.5	1753.5
5°	1749.7	1746.0	1732.2	1743.5	1742.2
7.5°	1737.2	1733.4	1717.1	1728.4	1724.7
10°	1719.6	1714.6	1695.8	1702.1	1697.1
12.5°	1695.8	1690.8	1668.2	1670.7	1668.2
15°	1667.0	1660.7	1631.8	1630.6	1624.3
17.5°	1634.3	1625.6	1594.2	1590.4	1580.4
20°	1596.7	1585.4	1550.3	1542.8	1536.5
22.5°	1554.1	1542.8	1501.4	1490.1	1486.3
25°	1512.7	1495.1	1451.2	1436.2	1427.4
27.5°	1463.8	1443.7	1398.5	1378.5	1363.4
30°	1413.6	1391.0	1343.4	1317.0	1300.7
32.5°	1362.2	1335.8	1284.4	1251.8	1238.0
35°	1309.5	1278.1	1225.4	1189.1	1174.0
37.5°	1249.3	1217.9	1165.2	1122.6	1108.8
40°	1191.6	1159.0	1102.5	1056.1	1038.6
42.5°	1131.4	1097.5	1036.0	987.1	972.1
45°	1068.7	1033.5	972.1	920.7	901.8
47.5°	1005.9	970.8	906.9	855.4	831.6
50°	943.2	905.6	837.9	785.2	761.4
52.5°	880.5	839.1	772.6	716.2	694.9
55°	811.5	776.4	702.4	646.0	624.6
57.5°	750.1	711.2	640.9	583.2	559.4
60°	686.1	643.5	572.0	515.5	492.9
62.5°	618.4	575.7	506.7	450.3	430.2
65°	551.9	509.2	442.8	387.6	368.8
67.5°	485.4	445.3	378.8	327.4	306.0
70°	421.4	380.1	313.6	267.2	254.6
72.5°	353.7	321.1	254.6	213.2	203.2
75°	293.5	257.1	198.2	165.6	156.8
77.5°	232.0	196.9	146.8	124.2	116.6
80°	173.1	143.0	102.9	89.1	86.5
82.5°	119.2	90.3	67.7	65.2	64.0
85°	74.0	47.7	42.6	40.1	40.1
87.5°	31.4	20.1	20.1	18.8	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)