

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: P243755

Luminaire Tested: **S125RDR-H850D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243755  
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-H850D935-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2686.3 lumens  
Efficiency: N/A  
Efficacy: 113.8 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

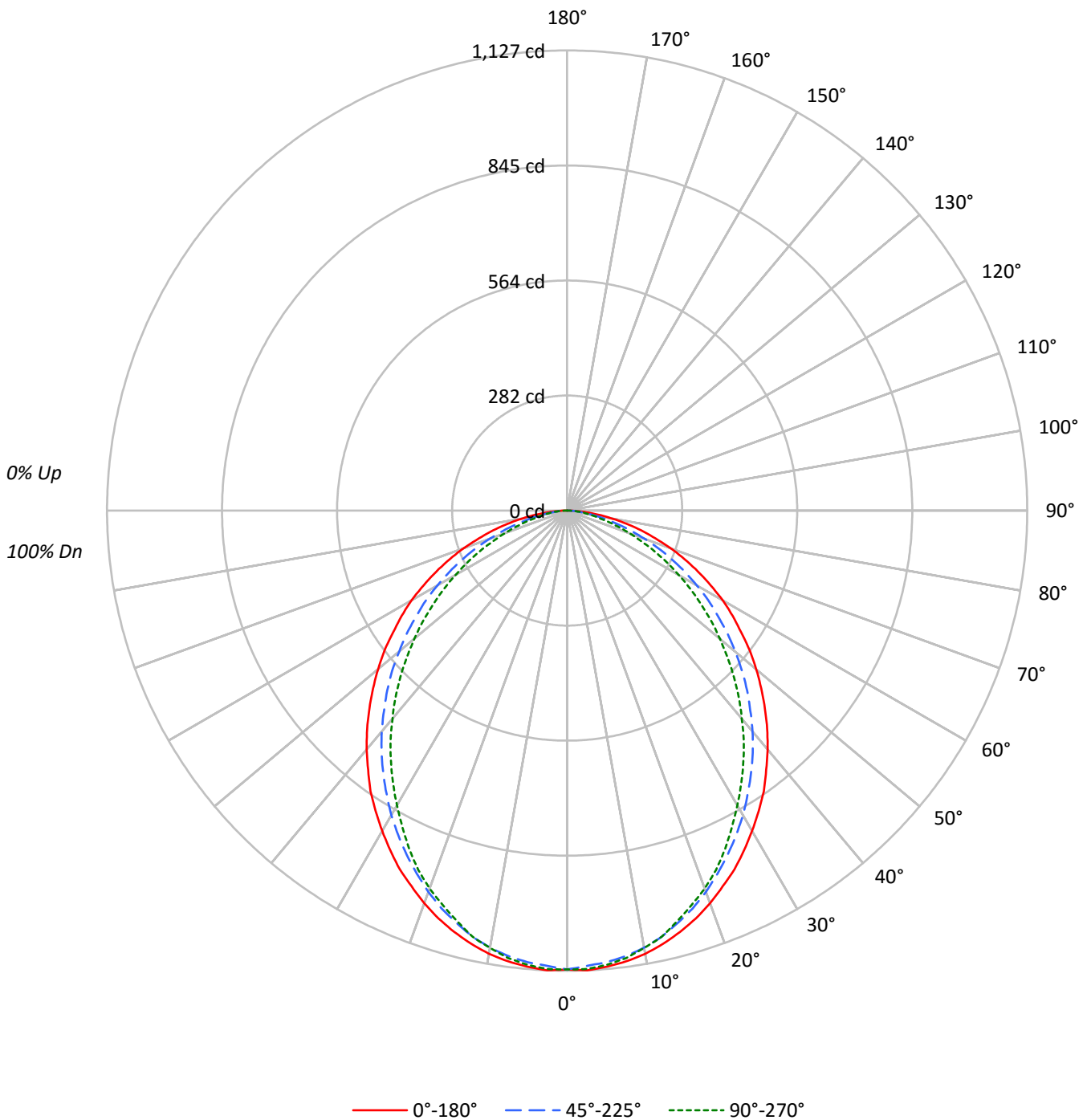
Input Watts (W): 23.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7987	7987	7987
5°	8001	7921	7966
10°	7954	7844	7850
15°	7861	7696	7660
20°	7740	7515	7449
25°	7603	7294	7174
30°	7435	7066	6841
35°	7282	6814	6528
40°	7086	6556	6175
45°	6884	6262	5810
50°	6684	5938	5396
55°	6445	5579	4960
60°	6250	5211	4490
65°	5948	4773	3974
70°	5613	4177	3391
75°	5165	3488	2760
80°	4539	2697	2272
85°	3865	2226	2096



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.8	3.9
10°-20°	296.5	11.0
20°-30°	431.4	16.1
30°-40°	494.1	18.4
40°-50°	483.5	18.0
50°-60°	408.2	15.2
60°-70°	285.8	10.6
70°-80°	145.1	5.4
80°-90°	35.7	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°	833.8	31.0
0°-40°	1327.9	49.4
0°-60°	2219.6	82.6
0°-90°	2686.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2686.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1124	1124	1124	1124	1124	
5°	1121	1119	1110	1117	1117	106
15°	1068	1064	1046	1045	1041	301
25°	970	958	930	920	915	446
35°	839	819	785	762	752	524
45°	685	662	623	590	578	529
55°	520	498	450	414	400	467
65°	354	326	284	248	236	350
75°	188	165	127	106	100	199
85°	47	30	27	26	26	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1123.8	1123.8	1123.8	1123.8	1123.8
2.5°	1127.1	1124.7	1115.8	1123.8	1123.8
5°	1121.4	1119.0	1110.2	1117.4	1116.6
7.5°	1113.4	1111.0	1100.5	1107.8	1105.4
10°	1102.1	1098.9	1086.9	1090.9	1087.7
12.5°	1086.9	1083.7	1069.2	1070.8	1069.2
15°	1068.4	1064.4	1045.9	1045.1	1041.0
17.5°	1047.5	1041.9	1021.8	1019.3	1012.9
20°	1023.4	1016.1	993.6	988.8	984.8
22.5°	996.0	988.8	962.3	955.0	952.6
25°	969.5	958.2	930.1	920.5	914.8
27.5°	938.1	925.3	896.3	883.5	873.8
30°	906.0	891.5	861.0	844.1	833.6
32.5°	873.0	856.2	823.2	802.3	793.4
35°	839.3	819.2	785.4	762.1	752.4
37.5°	800.7	780.6	746.8	719.5	710.6
40°	763.7	742.8	706.6	676.9	665.6
42.5°	725.1	703.4	664.0	632.7	623.0
45°	684.9	662.4	623.0	590.1	578.0
47.5°	644.7	622.2	581.2	548.3	533.0
50°	604.5	580.4	537.0	503.2	488.0
52.5°	564.3	537.8	495.2	459.0	445.4
55°	520.1	497.6	450.2	414.0	400.3
57.5°	480.7	455.8	410.8	373.8	358.5
60°	439.7	412.4	366.6	330.4	315.9
62.5°	396.3	369.0	324.8	288.6	275.7
65°	353.7	326.4	283.8	248.4	236.3
67.5°	311.1	285.4	242.8	209.8	196.2
70°	270.1	243.6	201.0	171.2	163.2
72.5°	226.7	205.8	163.2	136.7	130.2
75°	188.1	164.8	127.0	106.1	100.5
77.5°	148.7	126.2	94.1	79.6	74.8
80°	110.9	91.6	65.9	57.1	55.5
82.5°	76.4	57.9	43.4	41.8	41.0
85°	47.4	30.5	27.3	25.7	25.7
87.5°	20.1	12.9	12.9	12.1	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)