

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: P243731

Luminaire Tested: **S125RDR-H850D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243731  
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-H850D927-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2471.6 lumens  
Efficiency: N/A  
Efficacy: 104.7 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

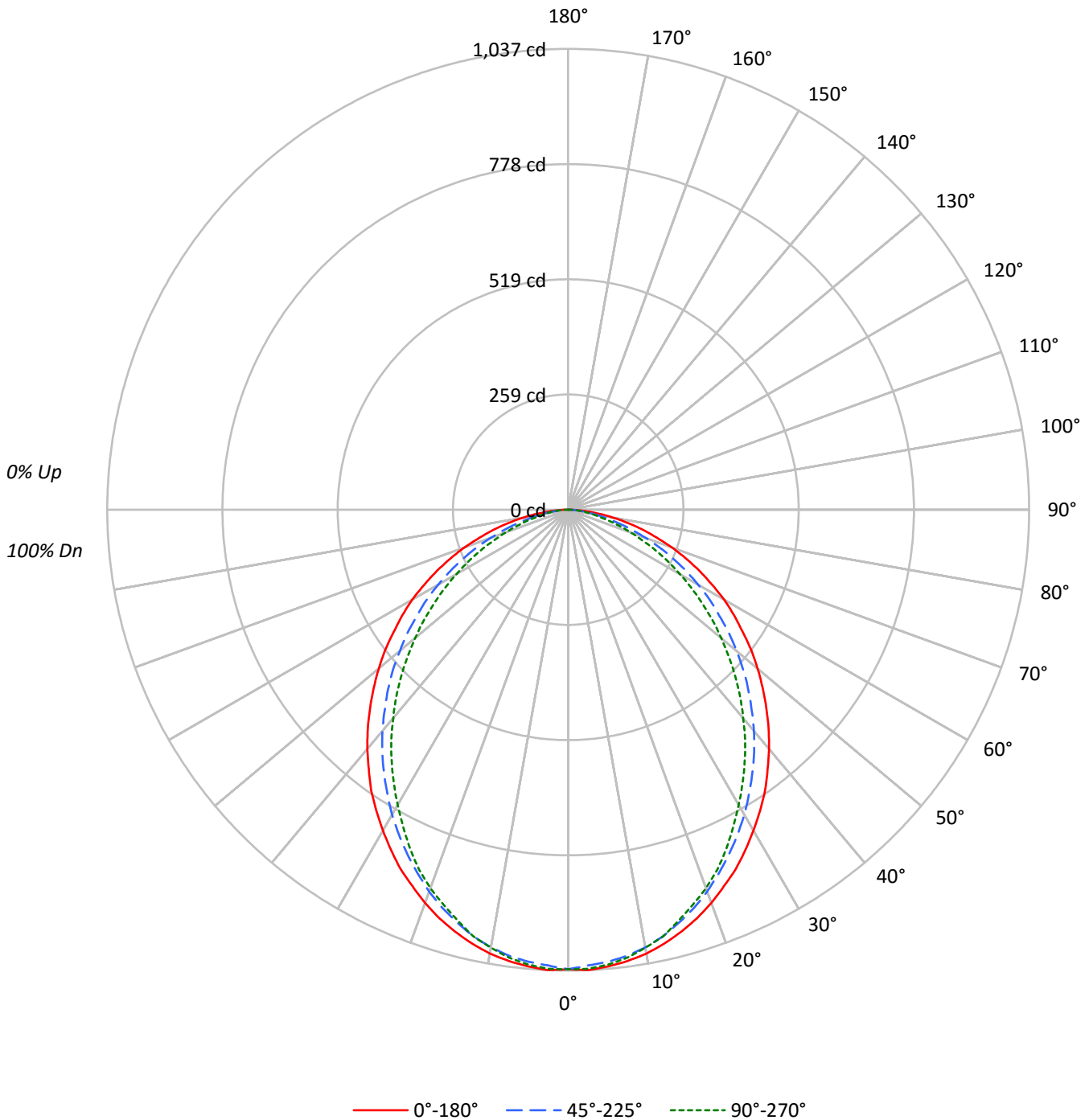
Input Watts (W): 23.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7349	7349	7349
5°	7361	7287	7330
10°	7319	7217	7222
15°	7233	7081	7048
20°	7122	6915	6853
25°	6995	6711	6601
30°	6841	6501	6295
35°	6700	6270	6007
40°	6520	6032	5682
45°	6334	5761	5345
50°	6150	5463	4965
55°	5930	5132	4564
60°	5751	4795	4132
65°	5472	4391	3658
70°	5164	3842	3119
75°	4753	3210	2540
80°	4179	2484	2087
85°	3555	2047	1933



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.4	3.9
10°-20°	272.8	11.0
20°-30°	397.0	16.1
30°-40°	454.6	18.4
40°-50°	444.8	18.0
50°-60°	375.6	15.2
60°-70°	263.0	10.6
70°-80°	133.5	5.4
80°-90°	32.9	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°	767.2	31.0
0°-40°	1221.8	49.4
0°-60°	2042.2	82.6
0°-90°	2471.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2471.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1034	1034	1034	1034	1034	
5°	1032	1030	1021	1028	1027	98
15°	983	979	962	962	958	277
25°	892	882	856	847	842	410
35°	772	754	723	701	692	482
45°	630	610	573	543	532	486
55°	479	458	414	381	368	429
65°	325	300	261	229	218	322
75°	173	152	117	98	92	183
85°	44	28	25	24	24	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1034.0	1034.0	1034.0	1034.0	1034.0
2.5°	1037.0	1034.8	1026.6	1034.0	1034.0
5°	1031.8	1029.6	1021.4	1028.1	1027.4
7.5°	1024.4	1022.2	1012.6	1019.2	1017.0
10°	1014.1	1011.1	1000.0	1003.7	1000.7
12.5°	1000.0	997.0	983.7	985.2	983.7
15°	983.0	979.3	962.3	961.5	957.8
17.5°	963.8	958.6	940.1	937.9	932.0
20°	941.6	934.9	914.2	909.8	906.1
22.5°	916.4	909.8	885.4	878.7	876.5
25°	892.0	881.7	855.8	846.9	841.7
27.5°	863.2	851.3	824.7	812.9	804.0
30°	833.6	820.3	792.2	776.6	767.0
32.5°	803.3	787.7	757.4	738.2	730.0
35°	772.2	753.7	722.6	701.2	692.3
37.5°	736.7	718.2	687.1	662.0	653.8
40°	702.7	683.4	650.1	622.8	612.4
42.5°	667.2	647.2	610.9	582.1	573.2
45°	630.2	609.5	573.2	542.9	531.8
47.5°	593.2	572.5	534.8	504.4	490.4
50°	556.2	534.0	494.1	463.0	449.0
52.5°	519.2	494.8	455.6	422.3	409.8
55°	478.6	457.8	414.2	380.9	368.3
57.5°	442.3	419.4	378.0	343.9	329.9
60°	404.6	379.4	337.3	304.0	290.7
62.5°	364.6	339.5	298.8	265.5	253.7
65°	325.4	300.3	261.1	228.6	217.5
67.5°	286.2	262.6	223.4	193.0	180.5
70°	248.5	224.1	184.9	157.5	150.1
72.5°	208.6	189.3	150.1	125.7	119.8
75°	173.1	151.6	116.9	97.6	92.5
77.5°	136.8	116.1	86.5	73.2	68.8
80°	102.1	84.3	60.7	52.5	51.0
82.5°	70.3	53.3	39.9	38.5	37.7
85°	43.6	28.1	25.1	23.7	23.7
87.5°	18.5	11.8	11.8	11.1	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)