

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: P243744

Luminaire Tested: **S125RDR-H610D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243744  
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-H610D840-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2249.8 lumens  
Efficiency: N/A  
Efficacy: 130.8 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

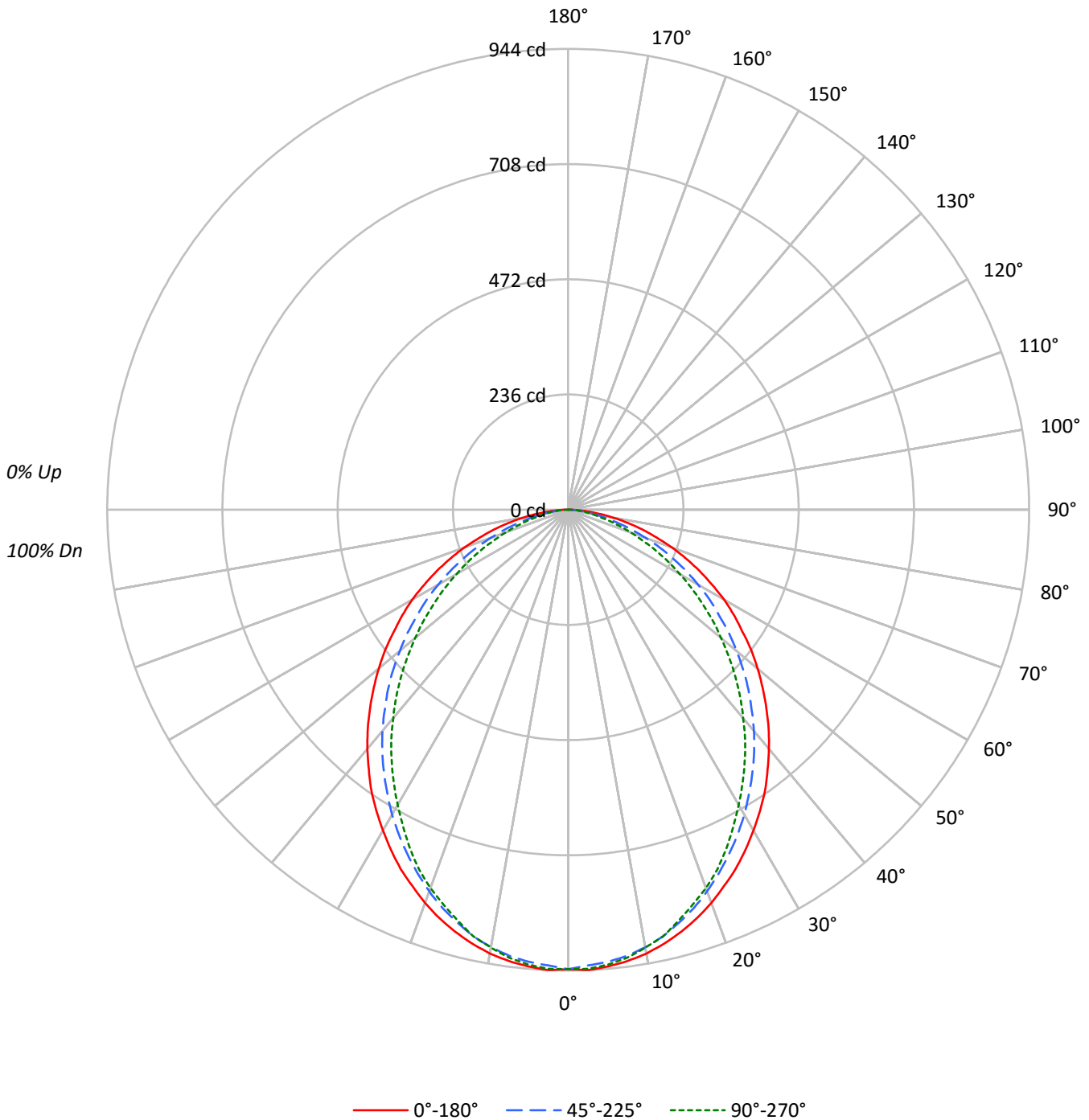
Input Watts (W): 17.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28

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

	0°	45°	90°
0°	6689	6689	6689
5°	6701	6634	6672
10°	6661	6569	6574
15°	6584	6445	6415
20°	6483	6294	6238
25°	6367	6109	6009
30°	6227	5918	5730
35°	6099	5707	5468
40°	5934	5491	5172
45°	5765	5245	4866
50°	5598	4972	4519
55°	5398	4672	4155
60°	5235	4364	3761
65°	4981	3997	3328
70°	4701	3497	2841
75°	4325	2922	2312
80°	3802	2259	1903
85°	3237	1867	1753



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.6	3.9
10°-20°	248.3	11.0
20°-30°	361.3	16.1
30°-40°	413.8	18.4
40°-50°	404.9	18.0
50°-60°	341.9	15.2
60°-70°	239.3	10.6
70°-80°	121.6	5.4
80°-90°	29.9	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°	698.3	31.0
0°-40°	1112.1	49.4
0°-60°	1858.9	82.6
0°-90°	2249.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2249.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	941	941	941	941	941	
5°	939	937	930	936	935	89
15°	895	891	876	875	872	252
25°	812	802	779	771	766	374
35°	703	686	658	638	630	439
45°	574	555	522	494	484	443
55°	436	417	377	347	335	391
65°	296	273	238	208	198	293
75°	158	138	106	89	84	167
85°	40	26	23	22	22	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	941.2	941.2	941.2	941.2	941.2
2.5°	943.9	941.9	934.5	941.2	941.2
5°	939.2	937.2	929.8	935.8	935.2
7.5°	932.5	930.4	921.7	927.7	925.7
10°	923.0	920.3	910.2	913.6	910.9
12.5°	910.2	907.6	895.4	896.8	895.4
15°	894.8	891.4	875.9	875.2	871.9
17.5°	877.3	872.5	855.7	853.7	848.3
20°	857.1	851.0	832.1	828.1	824.7
22.5°	834.2	828.1	805.9	799.8	797.8
25°	811.9	802.5	779.0	770.9	766.2
27.5°	785.7	774.9	750.7	739.9	731.8
30°	758.8	746.6	721.1	706.9	698.2
32.5°	731.2	717.0	689.4	671.9	664.5
35°	702.9	686.0	657.8	638.2	630.2
37.5°	670.6	653.7	625.5	602.6	595.2
40°	639.6	622.1	591.8	566.9	557.5
42.5°	607.3	589.1	556.1	529.9	521.8
45°	573.6	554.8	521.8	494.2	484.1
47.5°	540.0	521.1	486.8	459.2	446.4
50°	506.3	486.1	449.7	421.5	408.7
52.5°	472.6	450.4	414.7	384.4	373.0
55°	435.6	416.7	377.0	346.7	335.3
57.5°	402.6	381.7	344.0	313.1	300.3
60°	368.3	345.4	307.0	276.7	264.6
62.5°	331.9	309.0	272.0	241.7	230.9
65°	296.2	273.3	237.7	208.0	197.9
67.5°	260.6	239.0	203.3	175.7	164.3
70°	226.2	204.0	168.3	143.4	136.7
72.5°	189.9	172.4	136.7	114.5	109.1
75°	157.5	138.0	106.4	88.9	84.2
77.5°	124.6	105.7	78.8	66.7	62.6
80°	92.9	76.8	55.2	47.8	46.5
82.5°	64.0	48.5	36.4	35.0	34.3
85°	39.7	25.6	22.9	21.5	21.5
87.5°	16.8	10.8	10.8	10.1	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)