

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: P243740

Luminaire Tested: **S125RDR-H610D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243740  
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-H610D835-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**

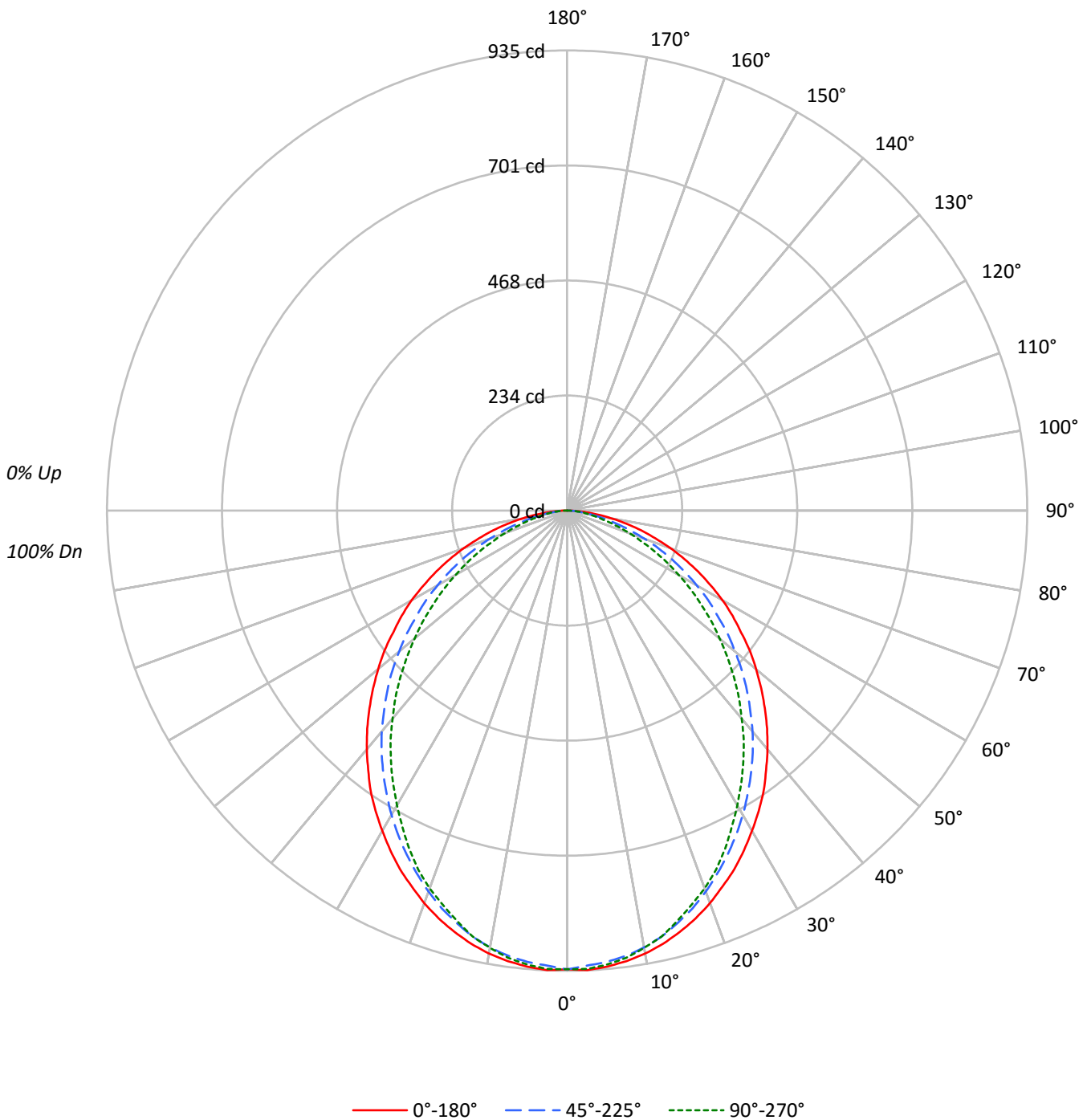
Lumens per Lamp: N/A  
Luminaire Lumens: 2227.7 lumens  
Efficiency: N/A  
Efficacy: 129.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.2  
Input Voltage (V): 120  
Input Current (Ain): 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°	6624	6624	6624
5°	6635	6569	6607
10°	6596	6505	6510
15°	6519	6382	6353
20°	6419	6232	6177
25°	6305	6049	5950
30°	6166	5860	5673
35°	6039	5651	5414
40°	5876	5437	5121
45°	5709	5194	4818
50°	5543	4924	4475
55°	5344	4626	4114
60°	5184	4321	3724
65°	4933	3957	3296
70°	4655	3464	2812
75°	4284	2892	2287
80°	3766	2239	1883
85°	3205	1851	1737



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.8	3.9
10°-20°	245.9	11.0
20°-30°	357.8	16.1
30°-40°	409.8	18.4
40°-50°	401.0	18.0
50°-60°	338.5	15.2
60°-70°	237.0	10.6
70°-80°	120.4	5.4
80°-90°	29.6	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°	691.5	31.0
0°-40°	1101.2	49.4
0°-60°	1840.7	82.6
0°-90°	2227.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2227.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	930	928	921	927	926	88
15°	886	883	867	867	863	250
25°	804	795	771	763	759	370
35°	696	679	651	632	624	435
45°	568	549	517	489	479	438
55°	431	413	373	343	332	387
65°	293	271	235	206	196	291
75°	156	137	105	88	83	165
85°	39	25	23	21	21	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	932.0	932.0	932.0	932.0	932.0
2.5°	934.7	932.7	925.4	932.0	932.0
5°	930.0	928.0	920.7	926.7	926.0
7.5°	923.4	921.4	912.7	918.7	916.7
10°	914.0	911.4	901.4	904.7	902.0
12.5°	901.4	898.7	886.7	888.0	886.7
15°	886.0	882.7	867.4	866.7	863.4
17.5°	868.7	864.0	847.4	845.4	840.0
20°	848.7	842.7	824.0	820.0	816.7
22.5°	826.0	820.0	798.0	792.0	790.0
25°	804.0	794.7	771.3	763.3	758.7
27.5°	778.0	767.3	743.3	732.7	724.7
30°	751.3	739.3	714.0	700.0	691.3
32.5°	724.0	710.0	682.7	665.3	658.0
35°	696.0	679.3	651.3	632.0	624.0
37.5°	664.0	647.3	619.3	596.7	589.3
40°	633.3	616.0	586.0	561.3	552.0
42.5°	601.3	583.3	550.7	524.7	516.7
45°	568.0	549.3	516.7	489.3	479.3
47.5°	534.7	516.0	482.0	454.7	442.0
50°	501.3	481.3	445.3	417.3	404.7
52.5°	468.0	446.0	410.7	380.7	369.3
55°	431.3	412.7	373.3	343.3	332.0
57.5°	398.7	378.0	340.7	310.0	297.3
60°	364.7	342.0	304.0	274.0	262.0
62.5°	328.7	306.0	269.3	239.3	228.7
65°	293.3	270.7	235.3	206.0	196.0
67.5°	258.0	236.7	201.3	174.0	162.7
70°	224.0	202.0	166.7	142.0	135.3
72.5°	188.0	170.7	135.3	113.3	108.0
75°	156.0	136.7	105.3	88.0	83.3
77.5°	123.3	104.7	78.0	66.0	62.0
80°	92.0	76.0	54.7	47.3	46.0
82.5°	63.3	48.0	36.0	34.7	34.0
85°	39.3	25.3	22.7	21.3	21.3
87.5°	16.7	10.7	10.7	10.0	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)