

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: P231761

Luminaire Tested: **S125-RDR-LO-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231761  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33920)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125-RDR-LO-35-X-0048-1-U-DD-1-W  
Description: DEFINE 5 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1357.8 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.11 / 1.26  
Luminous Opening: Rectangular (W 0.39' x L: 3.92' x H: 0')  
CIE Type: Direct

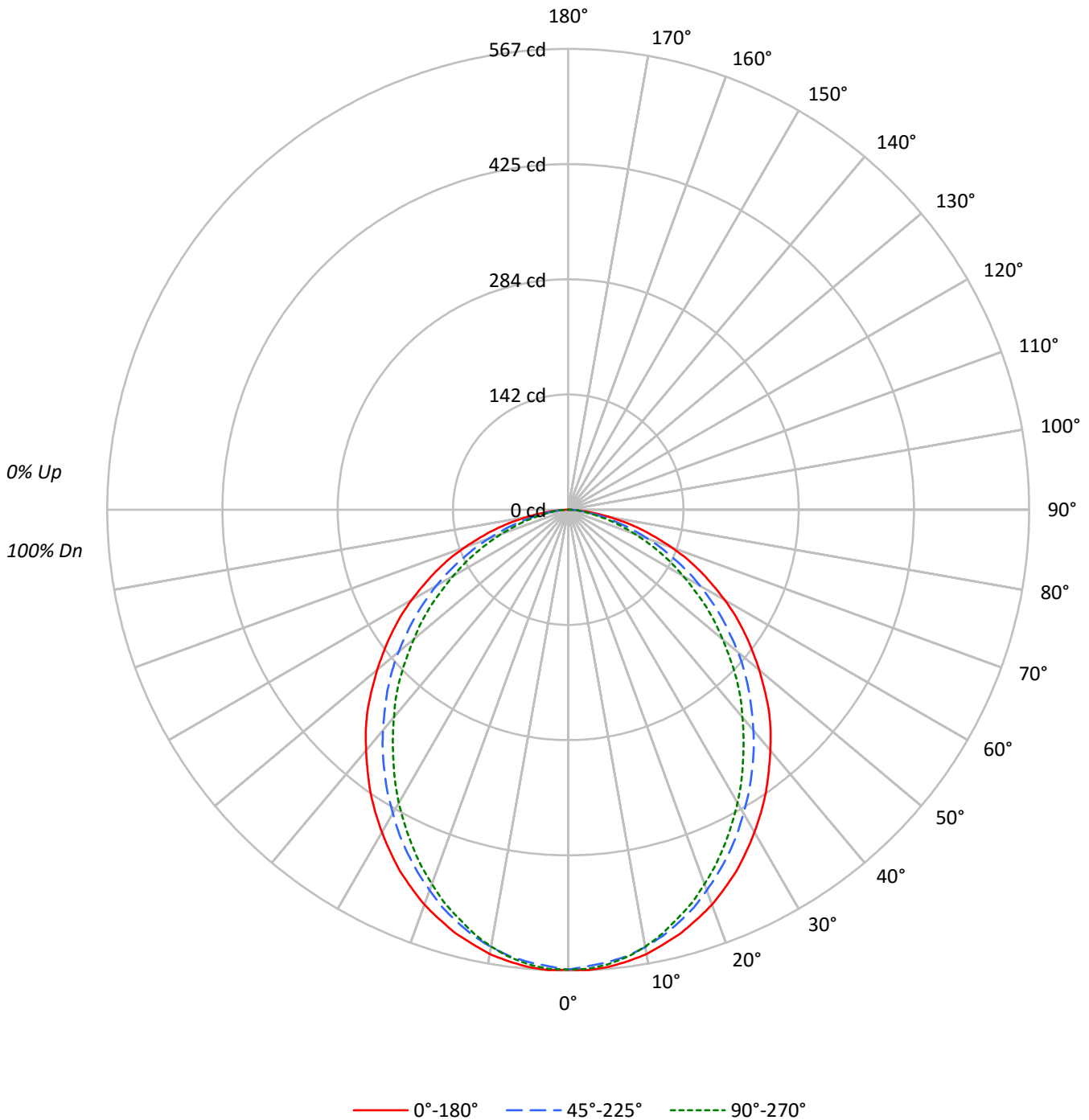
Input Watts (W): 13.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	78	65	56	50	75	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	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	28	38	33	28	27

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

	0°	45°	90°
0°	3988	3988	3988
5°	3995	3953	3972
10°	3972	3910	3906
15°	3931	3836	3796
20°	3878	3737	3675
25°	3811	3630	3538
30°	3728	3509	3390
35°	3648	3388	3225
40°	3558	3259	3066
45°	3477	3132	2911
50°	3362	2990	2717
55°	3257	2824	2532
60°	3133	2638	2303
65°	2995	2408	2074
70°	2775	2141	1795
75°	2505	1797	1503
80°	2086	1384	1165
85°	1488	1140	1091



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.2	3.9
10°-20°	148.9	11.0
20°-30°	216.5	15.9
30°-40°	248.3	18.3
40°-50°	244.3	18.0
50°-60°	207.7	15.3
60°-70°	146.8	10.8
70°-80°	74.4	5.5
80°-90°	17.7	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°	418.6	30.8
0°-40°	666.9	49.1
0°-60°	1118.9	82.4
0°-90°	1357.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1357.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	566	566	566	566	566	
5°	565	563	559	562	562	54
15°	539	536	526	524	520	152
25°	490	482	467	460	455	226
35°	424	413	394	382	375	265
45°	349	335	314	297	292	269
55°	265	250	230	213	206	237
65°	180	165	144	130	124	177
75°	92	81	66	57	55	97
85°	18	16	14	14	14	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	565.9	565.9	565.9	565.9	565.9
2.5°	567.0	565.9	562.1	565.9	565.3
5°	564.8	563.2	558.8	562.1	561.5
7.5°	560.5	558.8	554.0	556.1	555.1
10°	555.1	552.9	546.4	547.5	545.9
12.5°	546.9	544.8	537.2	536.7	534.5
15°	538.8	535.6	525.8	523.7	520.4
17.5°	528.0	524.2	513.4	510.2	506.9
20°	517.2	511.8	498.3	495.0	490.1
22.5°	503.7	497.2	483.1	478.2	473.4
25°	490.1	482.0	466.9	459.8	455.0
27.5°	474.4	466.9	450.1	440.9	436.0
30°	458.2	449.0	431.2	422.0	416.6
32.5°	441.4	431.2	413.3	401.4	396.5
35°	424.1	413.3	393.8	381.9	374.9
37.5°	405.2	393.8	374.9	361.4	354.3
40°	386.8	374.9	354.3	340.3	333.3
42.5°	368.4	356.0	333.8	319.2	313.8
45°	348.9	335.4	314.3	297.0	292.1
47.5°	327.3	314.9	293.8	277.0	269.4
50°	306.7	293.8	272.7	255.9	247.8
52.5°	285.6	273.2	250.5	234.2	227.8
55°	265.1	250.5	229.9	212.6	206.1
57.5°	244.5	229.4	208.3	192.1	183.9
60°	222.3	207.7	187.2	171.0	163.4
62.5°	200.2	186.6	166.6	150.9	144.4
65°	179.6	165.0	144.4	130.4	124.4
67.5°	158.0	145.0	124.4	110.9	105.5
70°	134.7	123.3	103.9	91.4	87.1
72.5°	113.1	101.7	84.9	74.1	70.3
75°	92.0	81.1	66.0	57.3	55.2
77.5°	70.9	62.2	49.2	42.2	40.6
80°	51.4	45.4	34.1	30.3	28.7
82.5°	33.5	28.7	22.7	21.6	21.1
85°	18.4	15.7	14.1	13.5	13.5
87.5°	6.5	7.0	6.5	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)