

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: P231666

Luminaire Tested: **S122-DR-LO-40-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231666  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33909)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122-DR-LO-40-X-0048-1-U-DD-1-W  
Description: DEFINE 2 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1308.9 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.14' x L: 3.92' x H: 0')  
CIE Type: Direct

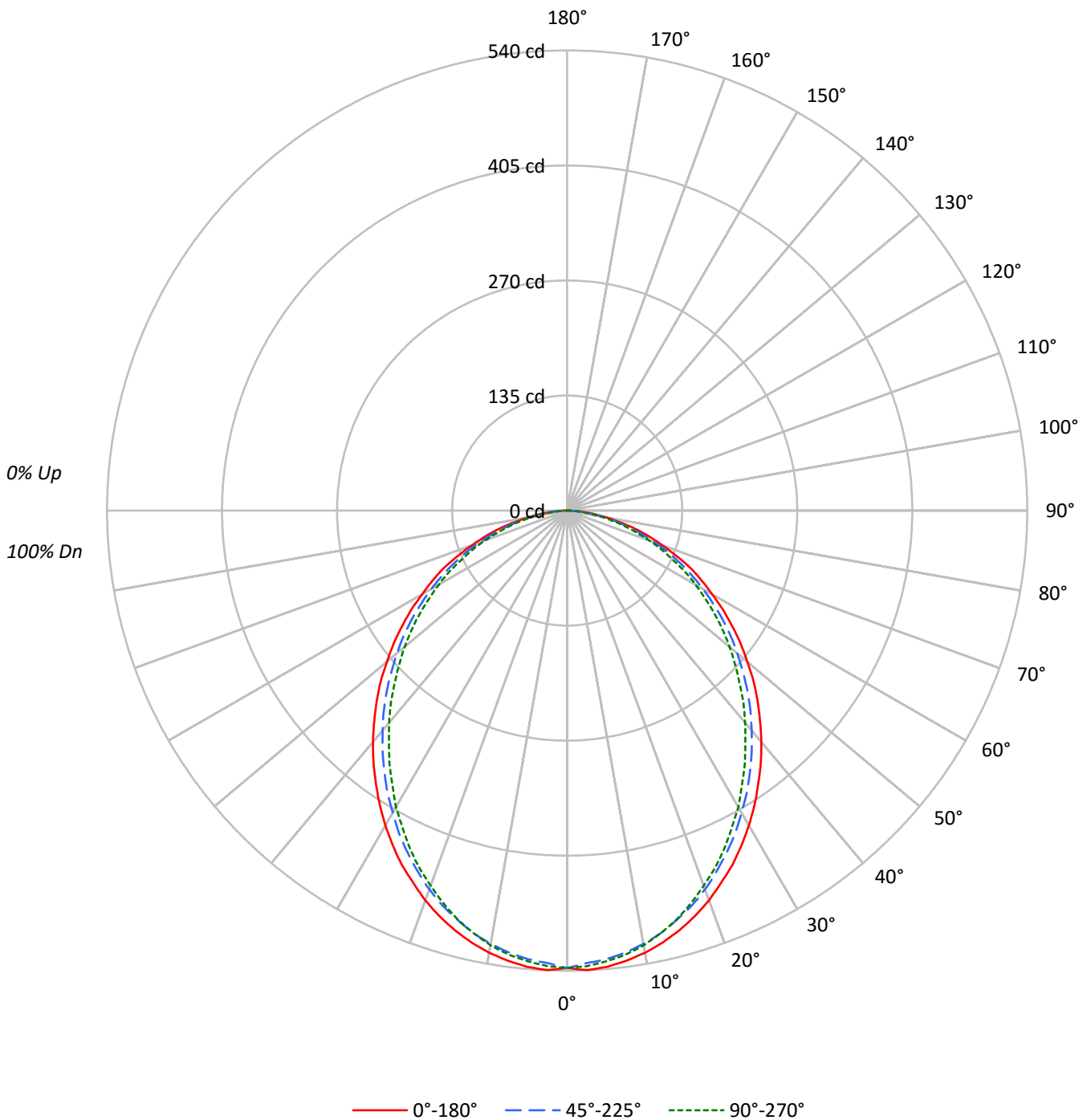
Input Watts (W): 13.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	58	52	47	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	46	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

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

	0°	45°	90°
0°	10537	10537	10537
5°	10589	10414	10461
10°	10501	10289	10323
15°	10358	10106	10094
20°	10167	9883	9785
25°	9939	9595	9467
30°	9667	9280	9105
35°	9372	8962	8708
40°	9084	8631	8328
45°	8778	8303	7942
50°	8432	7962	7601
55°	8094	7611	7228
60°	7711	7224	6831
65°	7427	6823	6359
70°	6807	6296	5889
75°	6265	5635	5233
80°	5336	4872	4533
85°	4392	3851	3446



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.4	3.9
10°-20°	141.1	10.8
20°-30°	205.2	15.7
30°-40°	235.1	18.0
40°-50°	231.5	17.7
50°-60°	199.7	15.3
60°-70°	145.9	11.1
70°-80°	79.6	6.1
80°-90°	20.3	1.6
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°	396.7	30.3
0°-40°	631.8	48.3
0°-60°	1063.0	81.2
0°-90°	1308.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1308.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	537	537	537	537	537	
5°	537	534	528	532	531	51
15°	510	505	497	498	497	144
25°	459	453	443	441	437	211
35°	391	385	374	367	363	245
45°	316	310	299	291	286	244
55°	236	233	222	214	211	212
65°	160	155	147	140	137	157
75°	83	78	74	71	69	87
85°	20	18	17	16	15	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	536.8	536.8	536.8	536.8	536.8
2.5°	539.7	537.4	531.5	536.2	535.0
5°	537.4	534.4	528.5	532.1	530.9
7.5°	532.7	529.7	523.2	526.8	525.6
10°	526.8	522.6	516.2	519.1	517.9
12.5°	519.1	514.4	507.9	510.3	507.9
15°	509.7	504.9	497.3	498.5	496.7
17.5°	499.0	493.7	486.1	486.1	483.1
20°	486.7	481.4	473.1	471.3	468.4
22.5°	472.5	467.2	458.3	457.2	453.6
25°	458.9	453.0	443.0	440.6	437.1
27.5°	443.0	437.1	427.1	422.4	418.8
30°	426.5	420.0	409.4	405.3	401.7
32.5°	409.4	403.5	392.3	386.4	381.7
35°	391.1	385.2	374.0	366.9	363.4
37.5°	373.4	366.3	355.7	348.0	343.3
40°	354.5	347.4	336.8	329.2	325.0
42.5°	335.1	328.6	318.5	309.7	306.2
45°	316.2	309.7	299.1	290.8	286.1
47.5°	296.7	290.2	279.6	270.8	267.2
50°	276.1	271.3	260.7	251.9	248.9
52.5°	256.6	251.9	241.9	233.0	230.1
55°	236.5	233.0	222.4	214.1	211.2
57.5°	217.1	213.0	202.9	195.8	191.7
60°	196.4	192.9	184.0	177.0	174.0
62.5°	178.1	174.0	165.2	158.7	156.3
65°	159.9	154.6	146.9	140.4	136.9
67.5°	138.6	135.7	128.0	121.5	120.3
70°	118.6	115.6	109.7	104.4	102.6
72.5°	100.9	97.3	91.4	87.3	84.9
75°	82.6	78.5	74.3	70.8	69.0
77.5°	63.7	61.9	57.8	54.9	53.7
80°	47.2	46.0	43.1	40.1	40.1
82.5°	33.0	31.3	28.9	27.1	26.5
85°	19.5	18.3	17.1	15.9	15.3
87.5°	8.3	7.7	6.5	5.9	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)