

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: P231665

Luminaire Tested: **S122-DR-LO-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231665  
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-35-X-0048-1-U-DD-1-W  
Description: DEFINE 2 LED LINEAR 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: 1284.2 lumens  
Efficiency: N/A  
Efficacy: 94.4 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

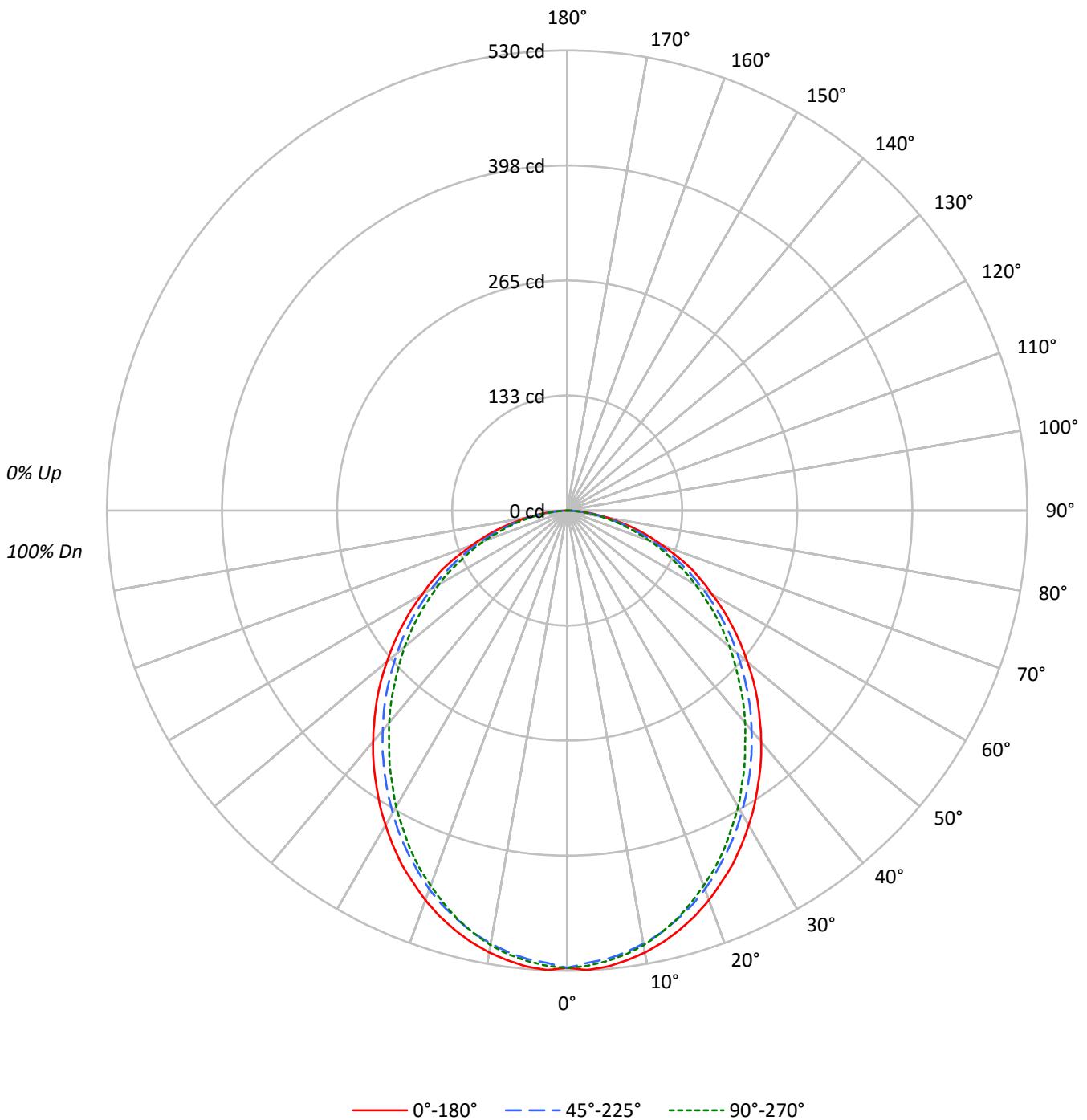
Input Watts (W): 13.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	10339	10339	10339
5°	10390	10219	10264
10°	10301	10094	10130
15°	10161	9915	9903
20°	9975	9697	9599
25°	9753	9413	9290
30°	9484	9105	8933
35°	9195	8792	8543
40°	8912	8469	8172
45°	8611	8145	7793
50°	8273	7812	7458
55°	7943	7468	7091
60°	7565	7090	6702
65°	7283	6693	6238
70°	6675	6176	5780
75°	6143	5529	5135
80°	5234	4771	4454
85°	4302	3784	3378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.5	3.9
10°-20°	138.4	10.8
20°-30°	201.4	15.7
30°-40°	230.6	18.0
40°-50°	227.2	17.7
50°-60°	195.9	15.3
60°-70°	143.2	11.1
70°-80°	78.1	6.1
80°-90°	19.9	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°	389.2	30.3
0°-40°	619.9	48.3
0°-60°	1042.9	81.2
0°-90°	1284.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1284.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	527	524	519	522	521	50
15°	500	495	488	489	487	141
25°	450	444	435	432	429	207
35°	384	378	367	360	356	240
45°	310	304	293	285	281	239
55°	232	229	218	210	207	208
65°	157	152	144	138	134	154
75°	81	77	73	70	68	85
85°	19	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°	526.7	526.7	526.7	526.7	526.7
2.5°	529.6	527.3	521.5	526.1	524.9
5°	527.3	524.4	518.6	522.0	520.9
7.5°	522.6	519.7	513.4	516.8	515.7
10°	516.8	512.8	506.4	509.3	508.2
12.5°	509.3	504.7	498.3	500.6	498.3
15°	500.0	495.4	487.9	489.1	487.3
17.5°	489.6	484.4	476.9	476.9	474.0
20°	477.5	472.3	464.2	462.4	459.5
22.5°	463.6	458.4	449.7	448.5	445.1
25°	450.3	444.5	434.6	432.3	428.9
27.5°	434.6	428.9	419.0	414.4	410.9
30°	418.4	412.1	401.7	397.6	394.1
32.5°	401.7	395.9	384.9	379.1	374.5
35°	383.7	377.9	366.9	360.0	356.5
37.5°	366.4	359.4	349.0	341.5	336.8
40°	347.8	340.9	330.5	322.9	318.9
42.5°	328.7	322.4	312.5	303.8	300.4
45°	310.2	303.8	293.4	285.3	280.7
47.5°	291.1	284.8	274.3	265.7	262.2
50°	270.9	266.2	255.8	247.1	244.2
52.5°	251.8	247.1	237.3	228.6	225.7
55°	232.1	228.6	218.2	210.1	207.2
57.5°	213.0	208.9	199.1	192.1	188.1
60°	192.7	189.3	180.6	173.6	170.7
62.5°	174.8	170.7	162.1	155.7	153.4
65°	156.8	151.6	144.1	137.7	134.3
67.5°	136.0	133.1	125.6	119.2	118.1
70°	116.3	113.4	107.6	102.4	100.7
72.5°	99.0	95.5	89.7	85.7	83.3
75°	81.0	77.0	72.9	69.5	67.7
77.5°	62.5	60.8	56.7	53.8	52.7
80°	46.3	45.1	42.2	39.4	39.4
82.5°	32.4	30.7	28.4	26.6	26.0
85°	19.1	17.9	16.8	15.6	15.0
87.5°	8.1	7.5	6.4	5.8	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)