

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: P231657

Luminaire Tested: **S121-DR-1-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231657
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33906)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121-DR-1-35-X-0048-1-U-DD-1-W
Description: DEFINE 1 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: 2608.5 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.1' x L: 3.92' x H: 0')
CIE Type: Direct

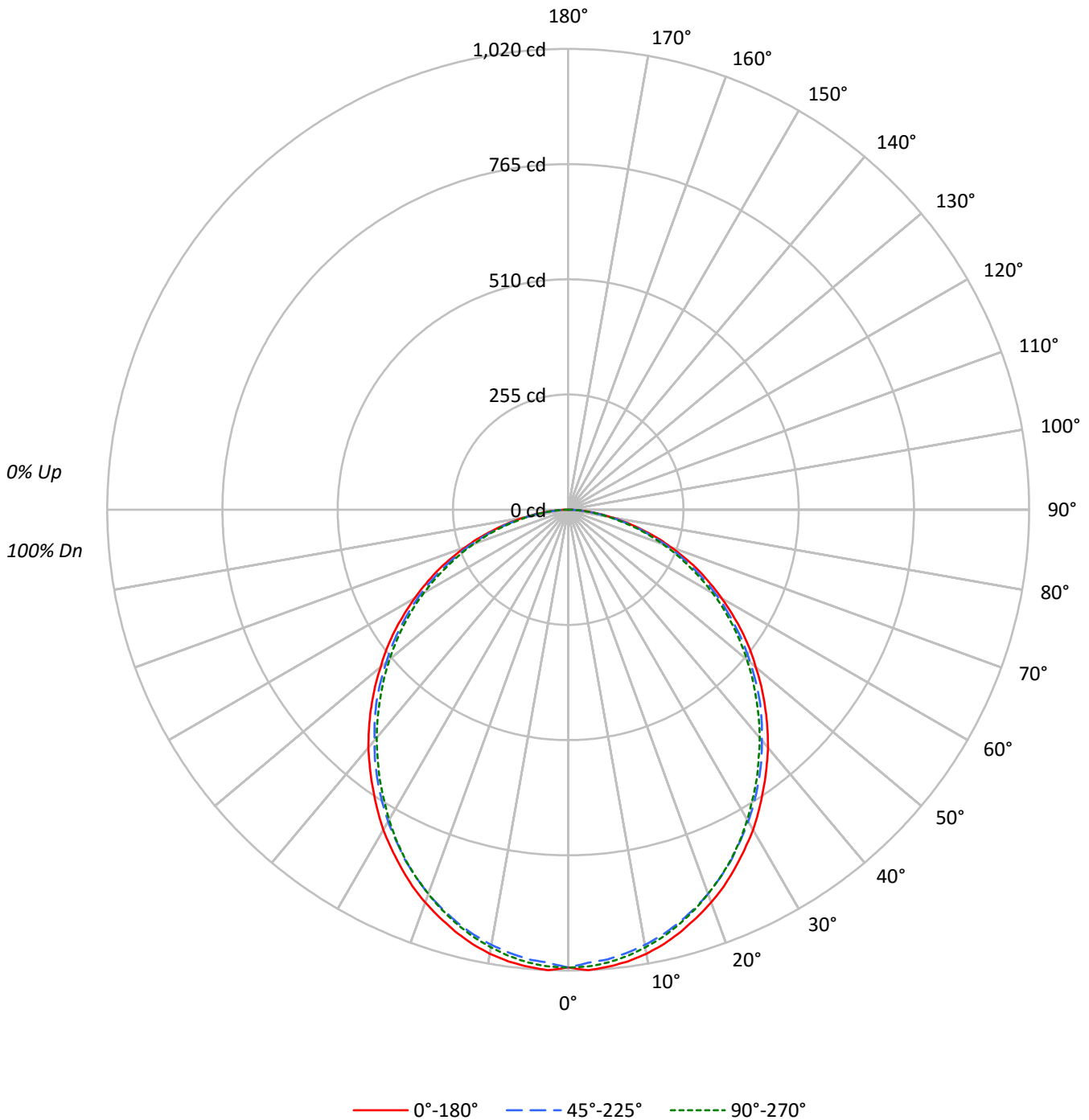
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28326	28326	28326
5°	28502	28039	28238
10°	28332	27764	27932
15°	27965	27386	27491
20°	27523	26928	26928
25°	26976	26362	26325
30°	26410	25729	25577
35°	25717	25075	24833
40°	25094	24324	24065
45°	24351	23703	23236
50°	23569	22852	22443
55°	22860	22056	21598
60°	21952	21231	20638
65°	21070	20137	19442
70°	19700	18931	18253
75°	18028	17272	16635
80°	15714	14957	14377
85°	13184	12061	11676



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	3.7
10°-20°	268.7	10.3
20°-30°	396.0	15.2
30°-40°	461.5	17.7
40°-50°	463.1	17.8
50°-60°	406.5	15.6
60°-70°	302.6	11.6
70°-80°	169.5	6.5
80°-90°	45.1	1.7
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°	760.2	29.1
0°-40°	1221.7	46.8
0°-60°	2091.3	80.2
0°-90°	2608.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2608.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1013	1013	1013	1013	1013	
5°	1016	1010	999	1008	1006	96
15°	966	958	946	953	950	272
25°	874	865	855	856	853	403
35°	754	745	735	731	728	472
45°	616	610	600	591	588	475
55°	469	463	452	447	443	419
65°	318	313	304	299	294	314
75°	167	163	160	154	154	178
85°	41	40	38	38	36	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1013.2	1013.2	1013.2	1013.2	1013.2
2.5°	1020.3	1014.4	1003.8	1014.4	1012.1
5°	1015.6	1009.7	999.1	1008.5	1006.2
7.5°	1008.5	1001.5	989.7	999.1	996.8
10°	998.0	988.6	978.0	985.0	983.9
12.5°	983.9	975.6	963.9	970.9	968.6
15°	966.2	958.0	946.2	953.3	949.8
17.5°	946.2	938.0	926.3	932.1	928.6
20°	925.1	915.7	905.1	909.8	905.1
22.5°	901.6	892.2	880.4	883.9	880.4
25°	874.5	865.1	854.6	855.7	853.4
27.5°	846.3	838.1	825.2	827.5	824.0
30°	818.1	809.9	797.0	795.8	792.3
32.5°	786.4	778.1	766.4	764.0	759.3
35°	753.5	745.2	734.7	731.1	727.6
37.5°	720.6	713.5	701.7	697.0	692.3
40°	687.6	679.4	666.5	661.8	659.4
42.5°	652.4	644.1	633.6	626.5	624.2
45°	615.9	610.1	599.5	591.3	587.7
47.5°	579.5	573.6	563.0	554.8	552.5
50°	541.9	537.2	525.4	518.4	516.0
52.5°	506.6	501.9	490.2	483.1	479.6
55°	469.0	463.1	452.5	446.7	443.1
57.5°	430.2	426.7	416.1	410.2	406.7
60°	392.6	387.9	379.7	371.4	369.1
62.5°	355.0	351.5	342.1	335.0	331.5
65°	318.5	312.7	304.4	298.6	293.9
67.5°	279.8	276.2	268.0	262.1	258.6
70°	241.0	237.4	231.6	225.7	223.3
72.5°	205.7	199.8	193.9	190.4	188.1
75°	166.9	163.4	159.9	154.0	154.0
77.5°	132.8	128.1	125.8	122.2	119.9
80°	97.6	96.4	92.9	91.7	89.3
82.5°	69.4	67.0	63.5	62.3	61.1
85°	41.1	40.0	37.6	37.6	36.4
87.5°	18.8	17.6	15.3	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)