

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: P231723

Luminaire Tested: **S122-RDR-LO-27-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231723
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33911)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-RDR-LO-27-X-0048-1-U-DD-1-W
Description: DEFINE 2 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 866.3 lumens
Efficiency: N/A
Efficacy: 63.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.14' x L: 3.92' x H: 0')
CIE Type: Direct

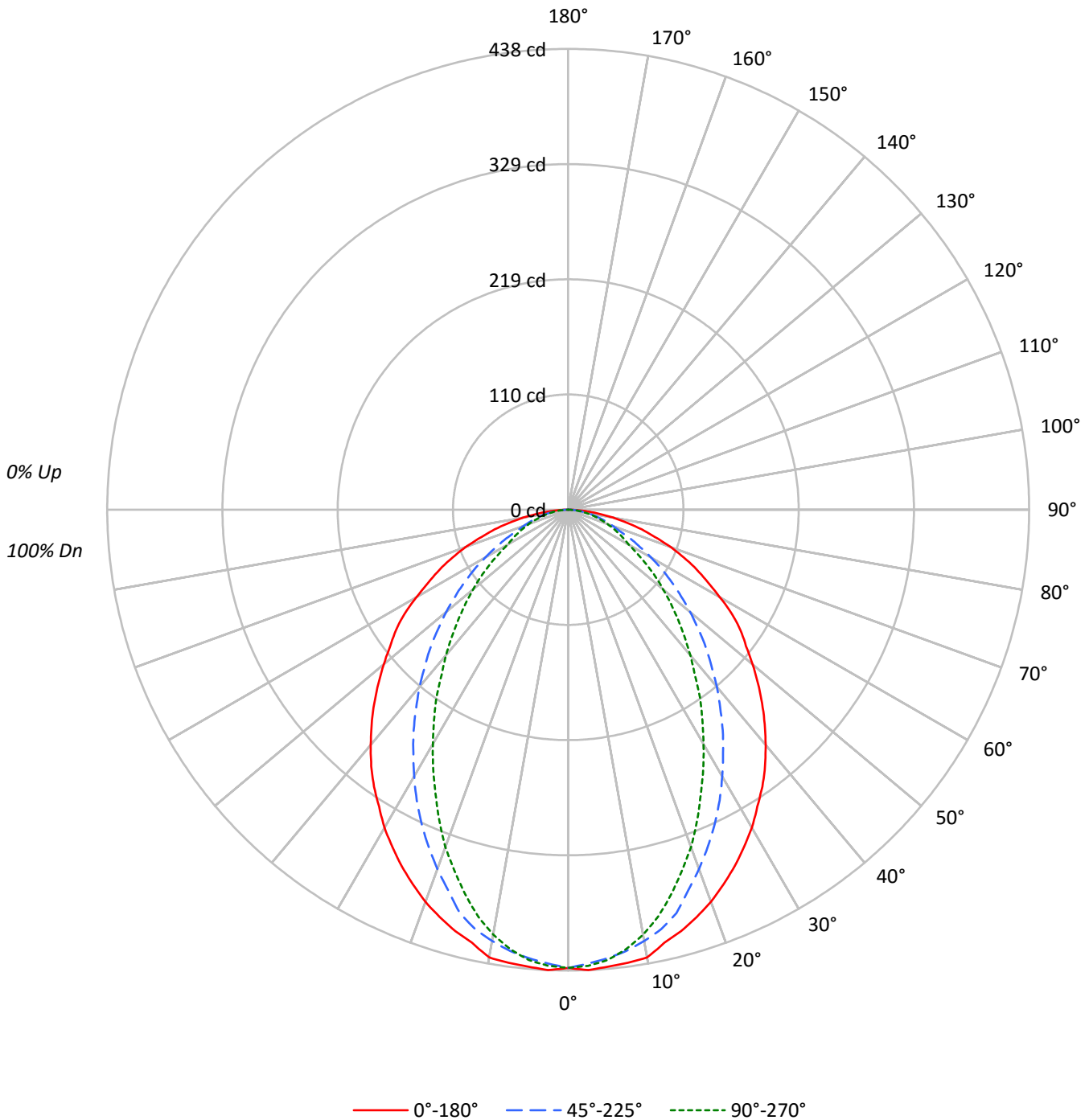
Input Watts (W): 13.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56
5	79	67	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39
8	64	51	43	38	63	51	43	38	49	43	38	48	42	37	47	41	37	35
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8549	8549	8549
5°	8589	8434	8467
10°	8615	8298	8174
15°	8426	8070	7688
20°	8287	7589	7128
25°	8103	7137	6457
30°	7913	6635	5830
35°	7704	6135	5234
40°	7480	5627	4623
45°	7235	5136	4092
50°	6987	4617	3597
55°	6845	4117	3114
60°	6541	3573	2607
65°	6266	3024	2443
70°	5946	2566	2279
75°	5476	2374	2093
80°	4861	2125	1888
85°	4144	1892	1689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.8	4.7
10°-20°	111.3	12.8
20°-30°	153.4	17.7
30°-40°	164.1	18.9
40°-50°	149.6	17.3
50°-60°	117.9	13.6
60°-70°	77.7	9.0
70°-80°	40.5	4.7
80°-90°	10.9	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°	305.5	35.3
0°-40°	469.6	54.2
0°-60°	737.2	85.1
0°-90°	866.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	866.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	436	433	428	431	430	41
15°	415	408	397	385	378	117
25°	374	360	330	309	298	172
35°	322	297	256	228	218	201
45°	261	230	185	157	147	201
55°	200	164	120	98	91	178
65°	135	100	65	54	53	133
75°	72	43	31	28	28	76
85°	18	9	8	8	8	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	435.5	435.5	435.5	435.5	435.5
2.5°	438.0	435.9	431.8	435.1	433.9
5°	435.9	433.4	428.0	431.3	429.7
7.5°	434.3	430.5	423.0	424.2	421.3
10°	432.2	427.6	416.3	413.4	410.1
12.5°	421.7	419.2	408.4	400.0	395.9
15°	414.6	408.4	397.1	385.0	378.3
17.5°	405.9	398.8	379.2	367.5	359.5
20°	396.7	386.7	363.3	350.3	341.2
22.5°	385.4	374.6	346.6	330.3	319.9
25°	374.1	359.9	329.5	308.6	298.1
27.5°	361.6	345.3	311.5	288.5	277.7
30°	349.1	329.9	292.7	267.7	257.2
32.5°	334.5	314.0	273.9	246.4	237.2
35°	321.5	297.3	256.0	227.6	218.4
37.5°	307.3	281.0	237.2	208.4	197.5
40°	291.9	263.9	219.6	190.4	180.4
42.5°	276.4	247.2	201.3	172.0	163.3
45°	260.6	230.1	185.0	156.6	147.4
47.5°	244.7	213.8	167.4	140.7	132.4
50°	228.8	197.1	151.2	126.1	117.8
52.5°	213.0	180.4	135.3	111.5	104.4
55°	200.0	163.7	120.3	98.1	91.0
57.5°	184.6	147.8	105.6	85.2	78.1
60°	166.6	131.1	91.0	71.4	66.4
62.5°	149.5	115.7	77.2	61.4	59.3
65°	134.9	99.8	65.1	53.9	52.6
67.5°	119.0	84.8	52.6	47.2	45.9
70°	103.6	70.2	44.7	40.5	39.7
72.5°	86.4	55.5	38.0	34.2	33.4
75°	72.2	42.6	31.3	28.4	27.6
77.5°	56.8	30.9	24.6	22.5	22.1
80°	43.0	22.5	18.8	17.5	16.7
82.5°	28.8	15.4	12.9	12.5	12.1
85°	18.4	9.2	8.4	7.9	7.5
87.5°	7.5	4.2	3.8	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)