

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: P231727

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231727
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-1-27-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: 1759.1 lumens
Efficiency: N/A
Efficacy: 63.1 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

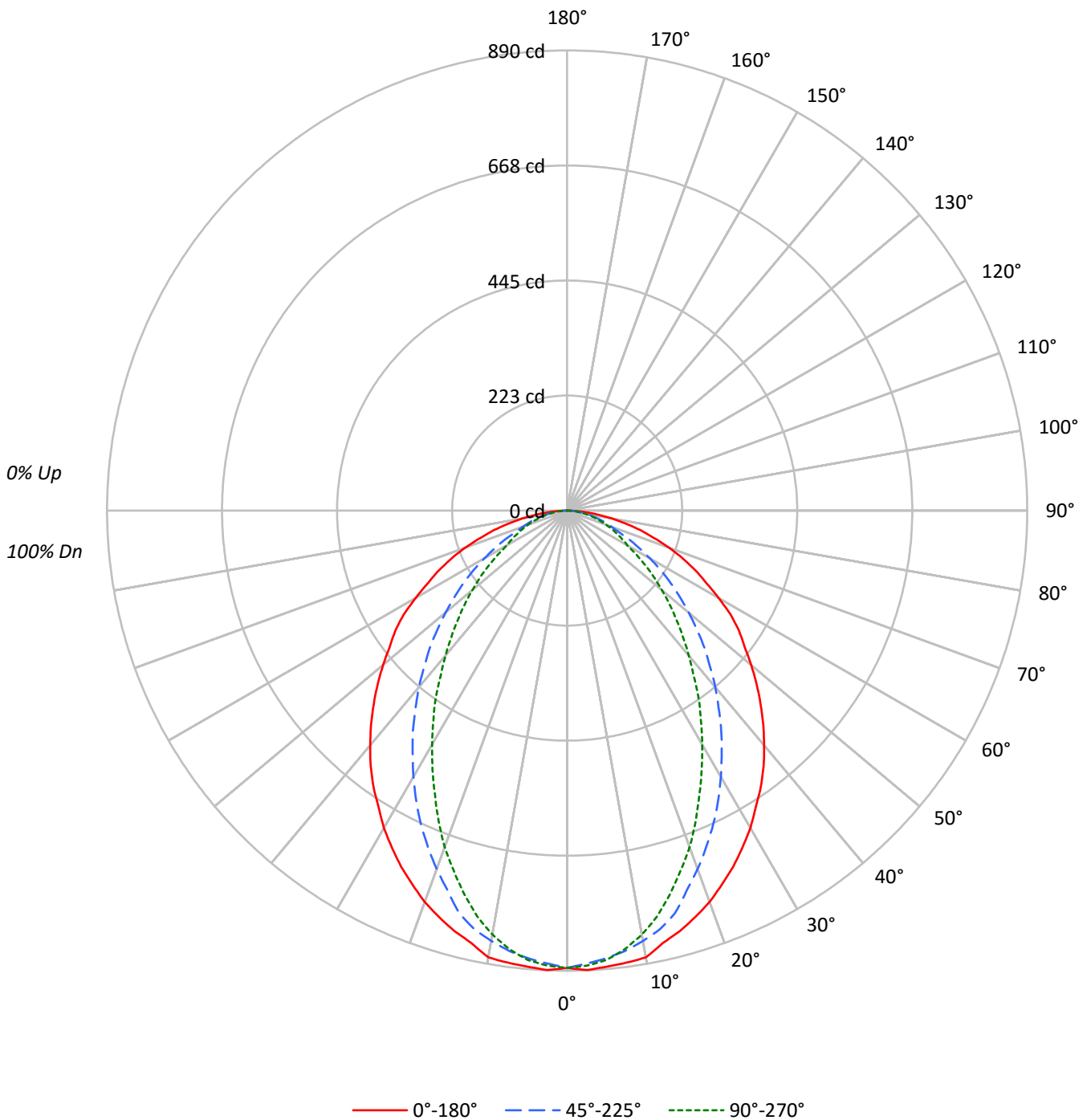
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74					74			
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64					64			
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56					56			
5	79	67	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49					49			
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44					44			
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39					39			
8	64	51	43	38	63	51	43	38	49	43	38	48	42	37	47	41	37	35					35			
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17361	17361	17361
5°	17443	17126	17193
10°	17493	16851	16596
15°	17112	16388	15612
20°	16827	15410	14470
25°	16455	14490	13113
30°	16066	13473	11839
35°	15646	12456	10628
40°	15188	11429	9387
45°	14688	10427	8309
50°	14191	9372	7302
55°	13898	8357	6325
60°	13282	7255	5292
65°	12722	6145	4961
70°	12070	5206	4626
75°	11126	4824	4247
80°	9869	4318	3832
85°	8401	3829	3446



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	4.7
10°-20°	226.0	12.8
20°-30°	311.5	17.7
30°-40°	333.2	18.9
40°-50°	303.8	17.3
50°-60°	239.5	13.6
60°-70°	157.7	9.0
70°-80°	82.3	4.7
80°-90°	22.2	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°	620.3	35.3
0°-40°	953.5	54.2
0°-60°	1496.8	85.1
0°-90°	1759.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1759.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	885	880	869	876	872	84
15°	842	829	806	782	768	237
25°	760	731	669	627	605	350
35°	653	604	520	462	444	408
45°	529	467	376	318	299	408
55°	406	332	244	199	185	361
65°	274	203	132	109	107	271
75°	147	86	64	58	56	155
85°	37	19	17	16	15	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	884.4	884.4	884.4	884.4	884.4
2.5°	889.5	885.2	876.7	883.5	881.0
5°	885.2	880.1	869.1	875.9	872.5
7.5°	881.8	874.2	858.9	861.5	855.5
10°	877.6	868.3	845.4	839.4	832.6
12.5°	856.4	851.3	829.3	812.3	803.8
15°	842.0	829.3	806.4	781.8	768.2
17.5°	824.2	809.7	769.9	746.2	730.0
20°	805.5	785.2	737.7	711.4	692.7
22.5°	782.6	760.6	703.8	670.7	649.5
25°	759.7	730.9	669.0	626.6	605.4
27.5°	734.3	701.2	632.5	585.9	563.9
30°	708.8	669.8	594.4	543.5	522.3
32.5°	679.2	637.6	556.2	500.3	481.6
35°	652.9	603.7	519.8	462.1	443.5
37.5°	624.1	570.6	481.6	423.1	401.1
40°	592.7	535.9	446.0	386.6	366.3
42.5°	561.3	502.0	408.7	349.3	331.5
45°	529.1	467.2	375.6	318.0	299.3
47.5°	496.9	434.1	340.0	285.7	268.8
50°	464.7	400.2	306.9	256.1	239.1
52.5°	432.4	366.3	274.7	226.4	212.0
55°	406.1	332.4	244.2	199.3	184.8
57.5°	374.8	300.2	214.5	173.0	158.6
60°	338.3	266.2	184.8	145.0	134.8
62.5°	303.5	234.9	156.9	124.6	120.4
65°	273.9	202.6	132.3	109.4	106.8
67.5°	241.7	172.1	106.8	95.8	93.3
70°	210.3	142.4	90.7	82.2	80.6
72.5°	175.5	112.8	77.2	69.5	67.8
75°	146.7	86.5	63.6	57.7	56.0
77.5°	115.3	62.7	50.0	45.8	44.9
80°	87.3	45.8	38.2	35.6	33.9
82.5°	58.5	31.4	26.3	25.4	24.6
85°	37.3	18.7	17.0	16.1	15.3
87.5°	15.3	8.5	7.6	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)