

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: P231671

Luminaire Tested: **S122-DR-2-27-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231671
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-2-27-X-0048-1-U-DD-1-W
Description: DEFINE 2 LED LINEAR 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: 2852.0 lumens
Efficiency: N/A
Efficacy: 66.9 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

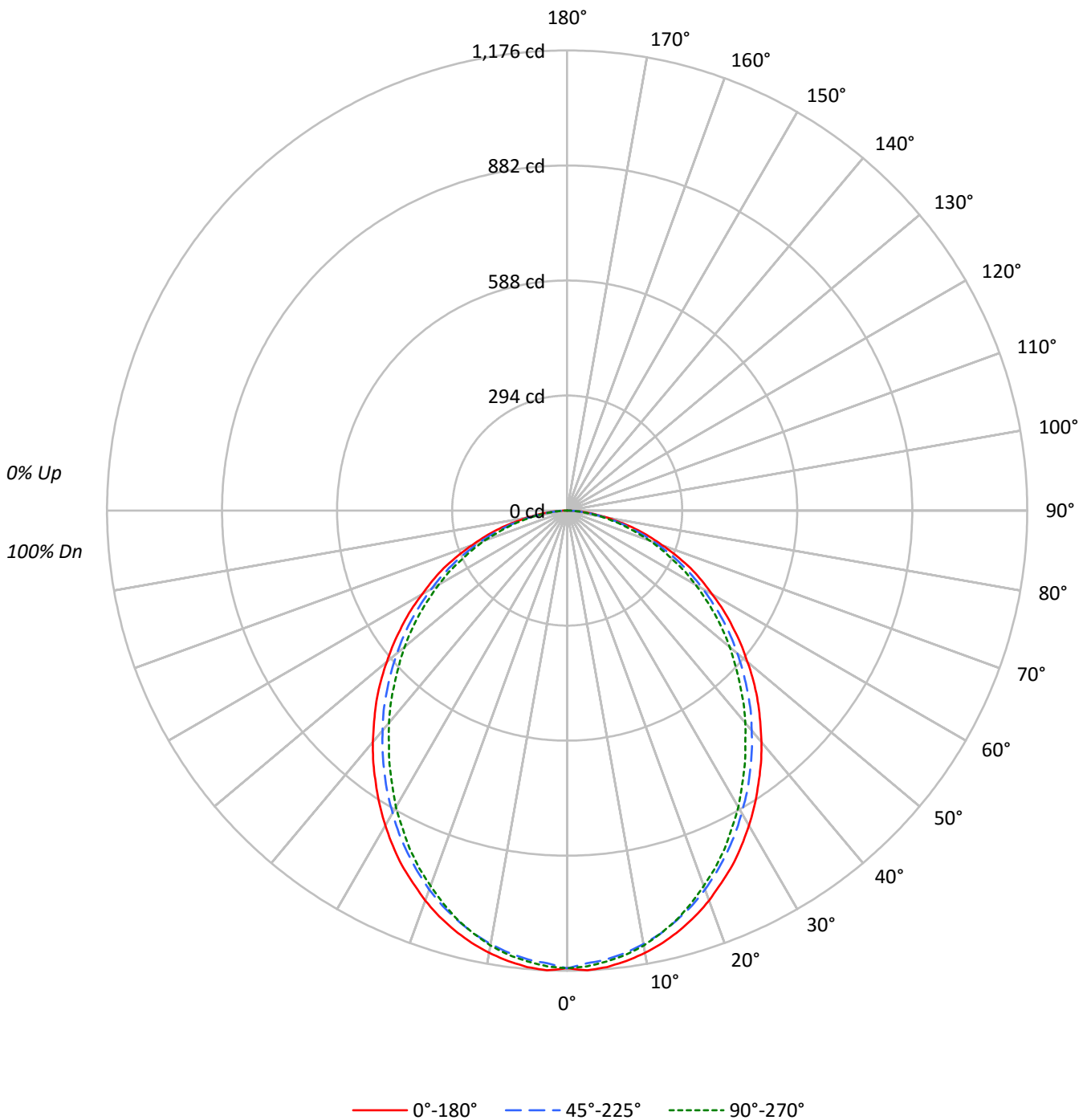
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	22961	22961	22961
5°	23075	22694	22795
10°	22879	22419	22496
15°	22570	22022	21995
20°	22152	21535	21320
25°	21659	20908	20631
30°	21064	20219	19840
35°	20422	19528	18975
40°	19795	18806	18148
45°	19127	18092	17306
50°	18372	17349	16564
55°	17639	16585	15750
60°	16803	15743	14887
65°	16178	14868	13851
70°	14831	13723	12839
75°	13652	12287	11407
80°	11621	10604	9880
85°	9550	8401	7523



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	3.9
10°-20°	307.4	10.8
20°-30°	447.2	15.7
30°-40°	512.2	18.0
40°-50°	504.5	17.7
50°-60°	435.0	15.3
60°-70°	318.0	11.1
70°-80°	173.5	6.1
80°-90°	44.3	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°	864.5	30.3
0°-40°	1376.7	48.3
0°-60°	2316.3	81.2
0°-90°	2852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2852.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1171	1164	1152	1159	1157	111
15°	1111	1100	1084	1086	1082	313
25°	1000	987	965	960	952	460
35°	852	839	815	800	792	533
45°	689	675	652	634	623	531
55°	515	508	485	467	460	461
65°	348	337	320	306	298	342
75°	180	171	162	154	150	190
85°	42	40	37	35	33	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1169.7	1169.7	1169.7	1169.7	1169.7
2.5°	1176.1	1171.0	1158.1	1168.4	1165.8
5°	1171.0	1164.5	1151.7	1159.4	1156.8
7.5°	1160.7	1154.3	1140.1	1147.8	1145.3
10°	1147.8	1138.8	1124.7	1131.1	1128.6
12.5°	1131.1	1120.8	1106.7	1111.8	1106.7
15°	1110.6	1100.3	1083.6	1086.1	1082.3
17.5°	1087.4	1075.9	1059.1	1059.1	1052.7
20°	1060.4	1048.9	1030.9	1027.0	1020.6
22.5°	1029.6	1018.0	998.7	996.2	988.4
25°	1000.0	987.2	965.3	960.2	952.5
27.5°	965.3	952.5	930.6	920.3	912.6
30°	929.3	915.2	892.0	883.0	875.3
32.5°	892.0	879.2	854.8	841.9	831.6
35°	852.2	839.3	814.9	799.5	791.8
37.5°	813.6	798.2	775.1	758.4	748.1
40°	772.5	757.1	733.9	717.2	708.2
42.5°	730.1	715.9	694.1	674.8	667.1
45°	689.0	674.8	651.7	633.7	623.4
47.5°	646.5	632.4	609.3	590.0	582.3
50°	601.6	591.3	568.1	548.9	542.4
52.5°	559.1	548.9	527.0	507.7	501.3
55°	515.4	507.7	484.6	466.6	460.2
57.5°	473.0	464.0	442.2	426.7	417.7
60°	428.0	420.3	401.0	385.6	379.2
62.5°	388.2	379.2	359.9	345.8	340.6
65°	348.3	336.8	320.1	305.9	298.2
67.5°	302.1	295.6	278.9	264.8	262.2
70°	258.4	251.9	239.1	227.5	223.7
72.5°	219.8	212.1	199.2	190.2	185.1
75°	180.0	171.0	162.0	154.2	150.4
77.5°	138.8	135.0	126.0	119.5	117.0
80°	102.8	100.3	93.8	87.4	87.4
82.5°	72.0	68.1	63.0	59.1	57.8
85°	42.4	39.8	37.3	34.7	33.4
87.5°	18.0	16.7	14.1	12.9	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)