

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: P231732

Luminaire Tested: **S122-RDR-2-30-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231732
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-2-30-X-0048-1-U-DD-1-W
Description: DEFINE 2 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3105.3 lumens
Efficiency: N/A
Efficacy: 72.9 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

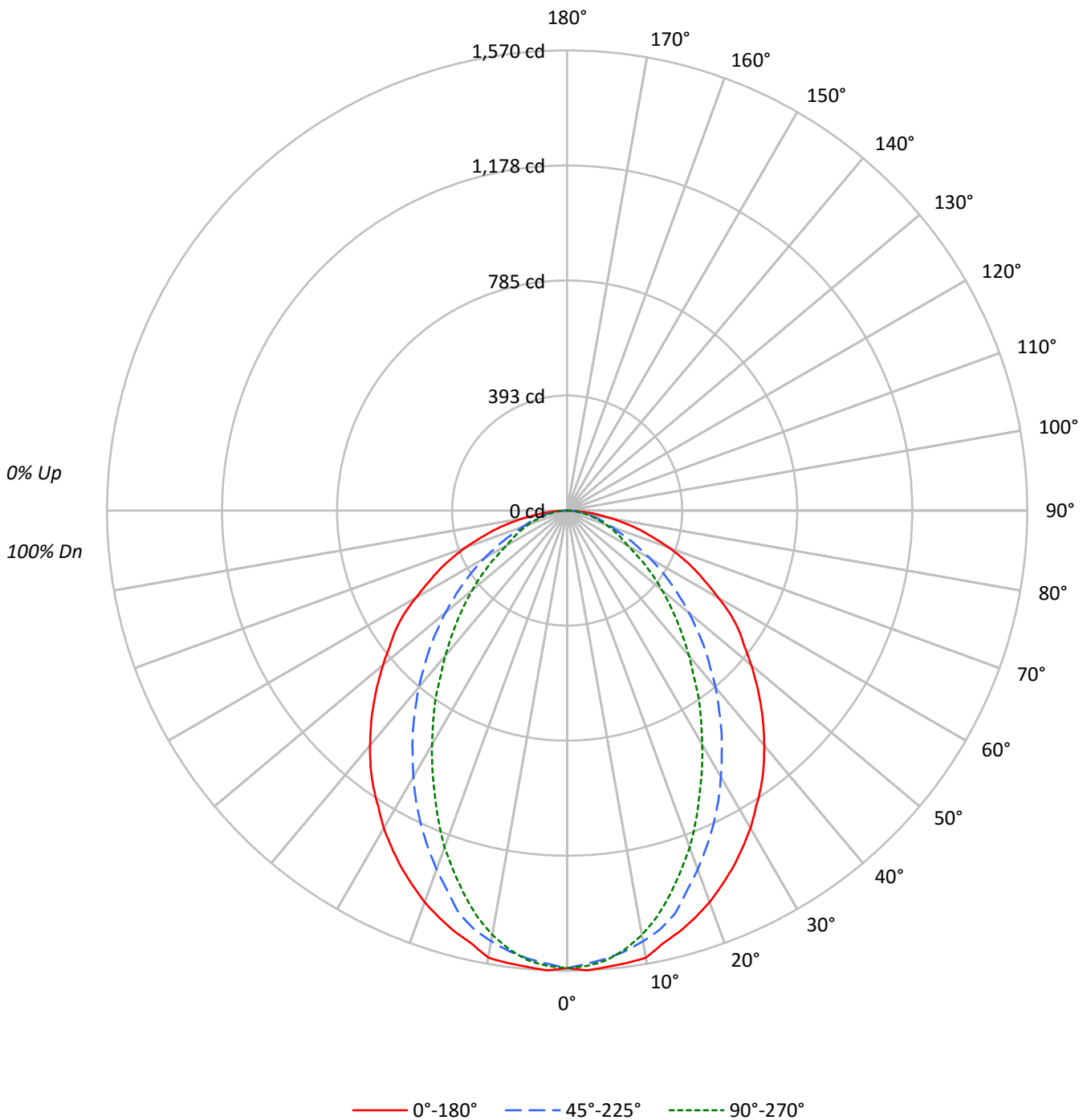
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	30645	30645	30645
5°	30791	30231	30350
10°	30878	29746	29297
15°	30205	28927	27559
20°	29703	27203	25544
25°	29047	25578	23147
30°	28363	23782	20899
35°	27618	21987	18759
40°	26809	20175	16569
45°	25929	18408	14669
50°	25048	16546	12891
55°	24535	14754	11167
60°	23446	12811	9344
65°	22453	10846	8760
70°	21305	9195	8161
75°	19636	8517	7493
80°	17432	7619	6771
85°	14843	6734	6059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	4.7
10°-20°	398.9	12.8
20°-30°	549.8	17.7
30°-40°	588.2	18.9
40°-50°	536.3	17.3
50°-60°	422.7	13.6
60°-70°	278.4	9.0
70°-80°	145.4	4.7
80°-90°	39.2	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°	1095.0	35.3
0°-40°	1683.2	54.2
0°-60°	2642.3	85.1
0°-90°	3105.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3105.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1561	1561	1561	1561	1561	
5°	1563	1554	1534	1546	1540	149
15°	1486	1464	1423	1380	1356	419
25°	1341	1290	1181	1106	1069	617
35°	1152	1066	918	816	783	720
45°	934	825	663	561	528	721
55°	717	587	431	352	326	637
65°	483	358	234	193	189	478
75°	259	153	112	102	99	273
85°	66	33	30	28	27	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1561.1	1561.1	1561.1	1561.1	1561.1
2.5°	1570.1	1562.6	1547.6	1559.6	1555.1
5°	1562.6	1553.6	1534.2	1546.1	1540.2
7.5°	1556.6	1543.1	1516.2	1520.7	1510.2
10°	1549.1	1532.7	1492.3	1481.8	1469.8
12.5°	1511.7	1502.7	1463.8	1433.9	1418.9
15°	1486.3	1463.8	1423.4	1380.0	1356.1
17.5°	1454.8	1429.4	1359.0	1317.1	1288.7
20°	1421.9	1386.0	1302.2	1255.8	1222.8
22.5°	1381.5	1342.6	1242.3	1183.9	1146.5
25°	1341.1	1290.2	1180.9	1106.1	1068.7
27.5°	1296.2	1237.8	1116.6	1034.3	995.3
30°	1251.3	1182.4	1049.2	959.4	922.0
32.5°	1198.9	1125.6	981.9	883.1	850.2
35°	1152.5	1065.7	917.5	815.7	782.8
37.5°	1101.6	1007.3	850.2	746.9	708.0
40°	1046.2	945.9	787.3	682.5	646.6
42.5°	990.8	886.1	721.4	616.7	585.2
45°	934.0	824.7	663.1	561.3	528.4
47.5°	877.1	766.3	600.2	504.4	474.5
50°	820.2	706.5	541.8	452.0	422.1
52.5°	763.3	646.6	484.9	399.6	374.2
55°	716.9	586.7	431.1	351.7	326.3
57.5°	661.6	529.8	378.7	305.3	279.9
60°	597.2	470.0	326.3	255.9	238.0
62.5°	535.8	414.6	276.9	220.0	212.5
65°	483.4	357.7	233.5	193.1	188.6
67.5°	426.6	303.8	188.6	169.1	164.6
70°	371.2	251.5	160.2	145.2	142.2
72.5°	309.8	199.1	136.2	122.7	119.7
75°	258.9	152.7	112.3	101.8	98.8
77.5°	203.6	110.8	88.3	80.8	79.3
80°	154.2	80.8	67.4	62.9	59.9
82.5°	103.3	55.4	46.4	44.9	43.4
85°	65.9	32.9	29.9	28.4	26.9
87.5°	26.9	15.0	13.5	12.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)