

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: P231730

Luminaire Tested: **S122-RDR-1-40-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231730
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-1-40-X-0048-1-U-DD-1-W
Description: DEFINE 2 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2322.9 lumens
Efficiency: N/A
Efficacy: 83.3 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

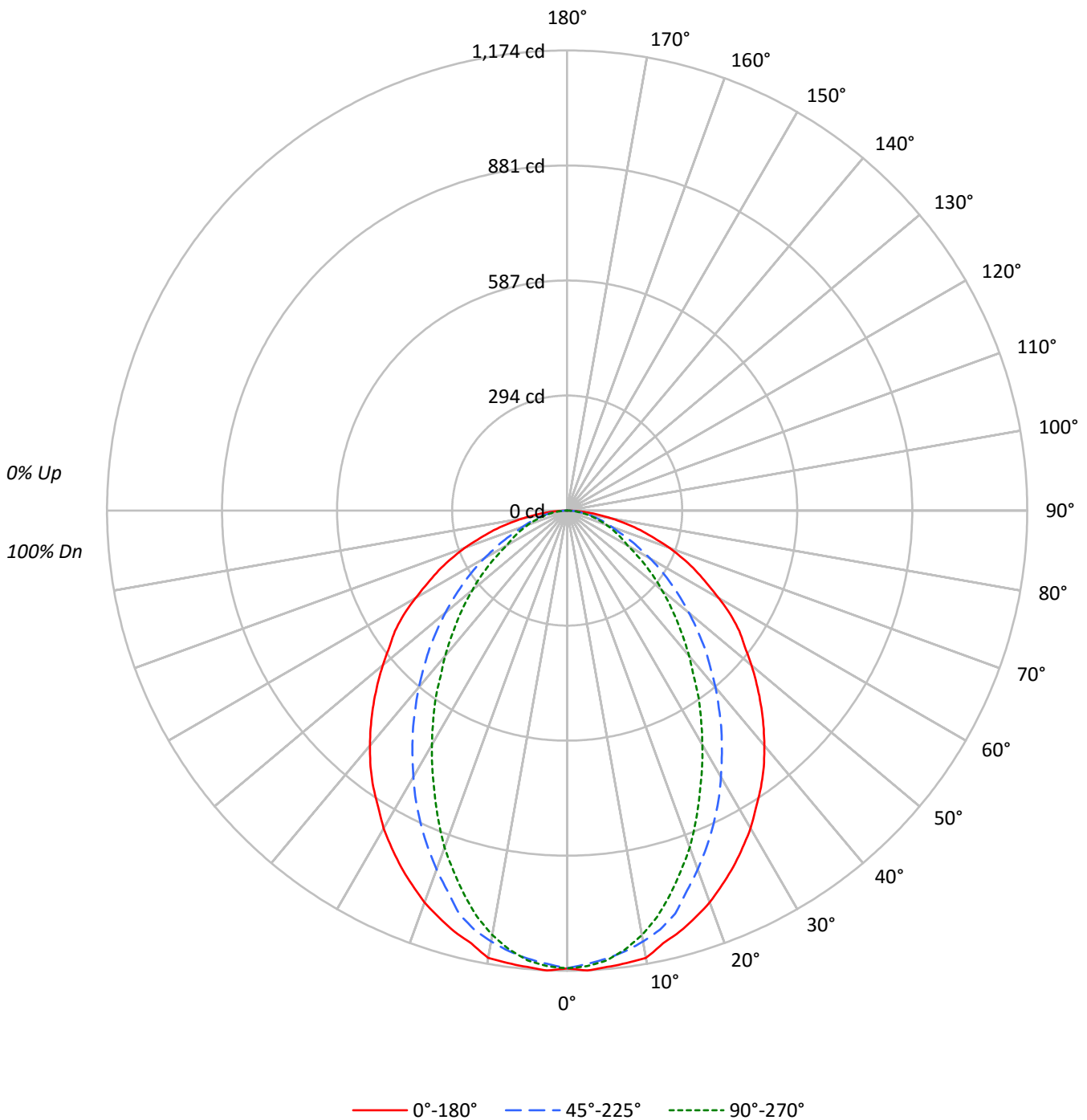
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	22924	22924	22924
5°	23033	22614	22702
10°	23098	22251	21916
15°	22595	21639	20615
20°	22221	20349	19110
25°	21729	19134	17315
30°	21216	17791	15633
35°	20659	16446	14033
40°	20054	15091	12395
45°	19397	13770	10971
50°	18739	12377	9641
55°	18354	11037	8354
60°	17538	9583	6988
65°	16796	8115	6554
70°	15938	6876	6107
75°	14691	6371	5605
80°	13034	5697	5064
85°	11104	5045	4550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.4	4.7
10°-20°	298.4	12.8
20°-30°	411.3	17.7
30°-40°	440.0	18.9
40°-50°	401.2	17.3
50°-60°	316.2	13.6
60°-70°	208.3	9.0
70°-80°	108.7	4.7
80°-90°	29.3	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°	819.1	35.3
0°-40°	1259.1	54.2
0°-60°	1976.6	85.1
0°-90°	2322.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2322.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1169	1162	1148	1157	1152	111
15°	1112	1095	1065	1032	1014	313
25°	1003	965	883	827	799	462
35°	862	797	686	610	586	539
45°	699	617	496	420	395	539
55°	536	439	322	263	244	477
65°	362	268	175	144	141	357
75°	194	114	84	76	74	204
85°	49	25	22	21	20	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1167.8	1167.8	1167.8	1167.8	1167.8
2.5°	1174.5	1168.9	1157.7	1166.7	1163.3
5°	1168.9	1162.2	1147.6	1156.6	1152.1
7.5°	1164.4	1154.4	1134.2	1137.6	1129.7
10°	1158.8	1146.5	1116.3	1108.5	1099.5
12.5°	1130.8	1124.1	1095.0	1072.6	1061.4
15°	1111.8	1095.0	1064.8	1032.3	1014.4
17.5°	1088.3	1069.3	1016.6	985.3	964.0
20°	1063.7	1036.8	974.1	939.4	914.8
22.5°	1033.4	1004.3	929.3	885.6	857.7
25°	1003.2	965.1	883.4	827.4	799.4
27.5°	969.6	926.0	835.3	773.7	744.6
30°	936.0	884.5	784.9	717.7	689.7
32.5°	896.8	842.0	734.5	660.6	636.0
35°	862.1	797.2	686.3	610.2	585.6
37.5°	824.1	753.5	636.0	558.7	529.6
40°	782.6	707.6	588.9	510.6	483.7
42.5°	741.2	662.8	539.7	461.3	437.8
45°	698.7	616.9	496.0	419.9	395.2
47.5°	656.1	573.3	449.0	377.3	354.9
50°	613.6	528.5	405.3	338.1	315.7
52.5°	571.0	483.7	362.8	298.9	279.9
55°	536.3	438.9	322.5	263.1	244.1
57.5°	494.9	396.4	283.3	228.4	209.4
60°	446.7	351.6	244.1	191.5	178.0
62.5°	400.8	310.1	207.1	164.6	159.0
65°	361.6	267.6	174.7	144.4	141.1
67.5°	319.1	227.3	141.1	126.5	123.2
70°	277.7	188.1	119.8	108.6	106.4
72.5°	231.8	148.9	101.9	91.8	89.6
75°	193.7	114.2	84.0	76.1	73.9
77.5°	152.3	82.9	66.1	60.5	59.3
80°	115.3	60.5	50.4	47.0	44.8
82.5°	77.3	41.4	34.7	33.6	32.5
85°	49.3	24.6	22.4	21.3	20.2
87.5°	20.2	11.2	10.1	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)