

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: P231731

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231731
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-2-27-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: 2492.7 lumens
Efficiency: N/A
Efficacy: 58.5 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

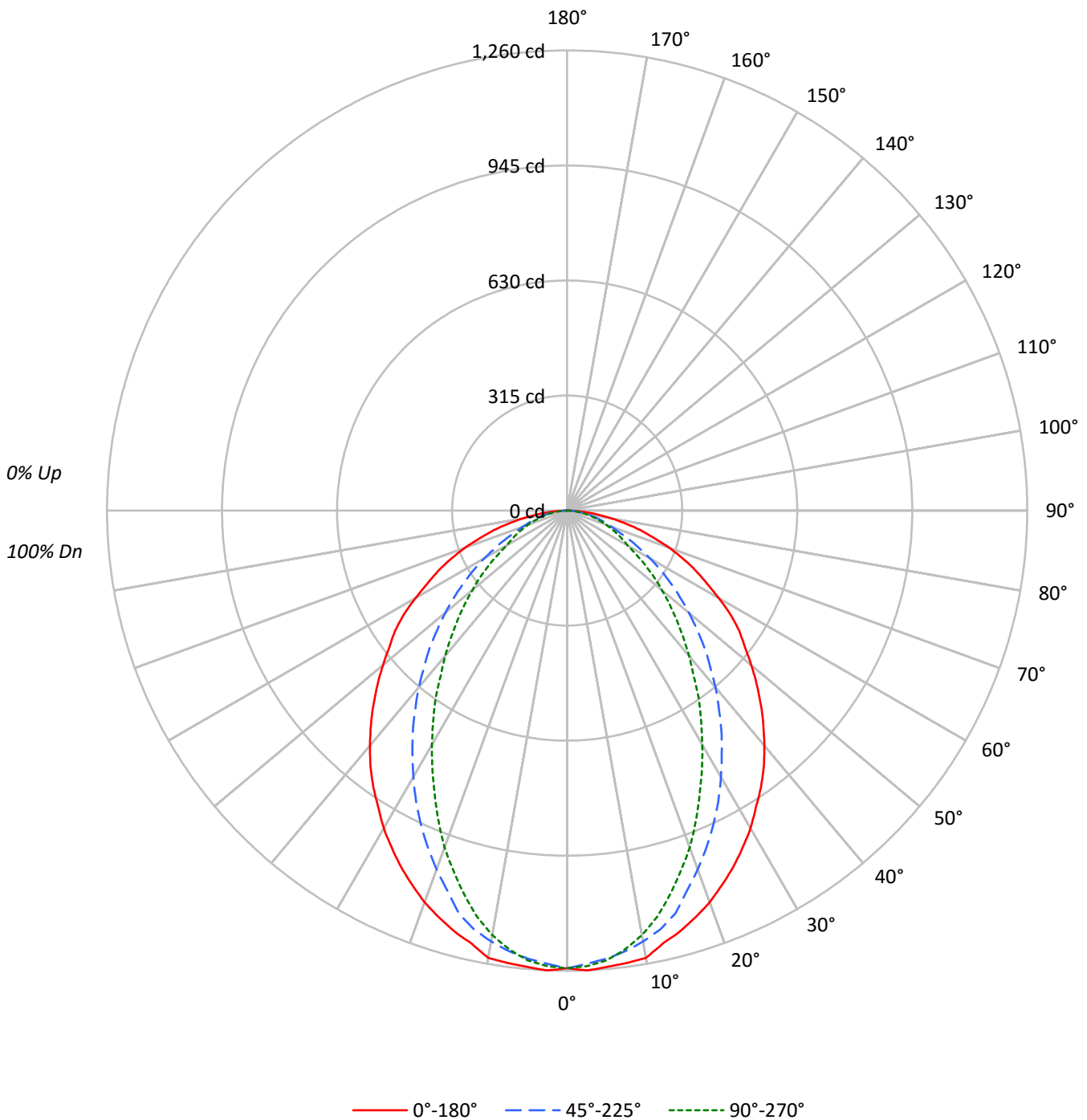
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	24598	24598	24598
5°	24716	24267	24361
10°	24787	23878	23519
15°	24247	23221	22121
20°	23844	21836	20506
25°	23316	20533	18582
30°	22767	19090	16776
35°	22169	17649	15059
40°	21520	16195	13299
45°	20813	14777	11773
50°	20107	13281	10347
55°	19696	11841	8963
60°	18821	10282	7499
65°	18027	8704	7032
70°	17104	7381	6549
75°	15768	6834	6014
80°	13995	6116	5437
85°	11915	5406	4865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.4	4.7
10°-20°	320.2	12.8
20°-30°	441.3	17.7
30°-40°	472.2	18.9
40°-50°	430.5	17.3
50°-60°	339.3	13.6
60°-70°	223.5	9.0
70°-80°	116.7	4.7
80°-90°	31.5	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°	879.0	35.3
0°-40°	1351.2	54.2
0°-60°	2121.0	85.1
0°-90°	2492.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2492.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1253	1253	1253	1253	1253	
5°	1254	1247	1232	1241	1236	119
15°	1193	1175	1143	1108	1088	336
25°	1076	1036	948	888	858	496
35°	925	856	736	655	628	578
45°	750	662	532	451	424	579
55°	576	471	346	282	262	512
65°	388	287	187	155	151	383
75°	208	123	90	82	79	219
85°	53	26	24	23	22	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1253.1	1253.1	1253.1	1253.1	1253.1
2.5°	1260.4	1254.3	1242.3	1251.9	1248.3
5°	1254.3	1247.1	1231.5	1241.1	1236.3
7.5°	1249.5	1238.7	1217.1	1220.7	1212.3
10°	1243.5	1230.3	1197.9	1189.5	1179.9
12.5°	1213.5	1206.3	1175.1	1151.0	1139.0
15°	1193.1	1175.1	1142.6	1107.8	1088.5
17.5°	1167.8	1147.4	1090.9	1057.3	1034.5
20°	1141.4	1112.6	1045.3	1008.0	981.6
22.5°	1109.0	1077.7	997.2	950.4	920.3
25°	1076.5	1035.7	948.0	887.9	857.9
27.5°	1040.5	993.6	896.3	830.2	799.0
30°	1004.4	949.2	842.2	770.2	740.1
32.5°	962.4	903.5	788.2	708.9	682.4
35°	925.1	855.5	736.5	654.8	628.4
37.5°	884.3	808.6	682.4	599.5	568.3
40°	839.8	759.3	632.0	547.9	519.0
42.5°	795.4	711.3	579.1	495.0	469.8
45°	749.7	662.0	532.3	450.6	424.1
47.5°	704.1	615.2	481.8	404.9	380.9
50°	658.4	567.1	434.9	362.8	338.8
52.5°	612.8	519.0	389.3	320.8	300.4
55°	575.5	471.0	346.0	282.3	261.9
57.5°	531.1	425.3	304.0	245.1	224.7
60°	479.4	377.3	261.9	205.5	191.0
62.5°	430.1	332.8	222.3	176.6	170.6
65°	388.1	287.2	187.4	155.0	151.4
67.5°	342.4	243.9	151.4	135.8	132.2
70°	298.0	201.8	128.6	116.5	114.1
72.5°	248.7	159.8	109.3	98.5	96.1
75°	207.9	122.6	90.1	81.7	79.3
77.5°	163.4	88.9	70.9	64.9	63.7
80°	123.8	64.9	54.1	50.5	48.1
82.5°	82.9	44.5	37.2	36.0	34.8
85°	52.9	26.4	24.0	22.8	21.6
87.5°	21.6	12.0	10.8	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)