

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: P231728

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231728
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-1-30-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: 2191.4 lumens
Efficiency: N/A
Efficacy: 78.5 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

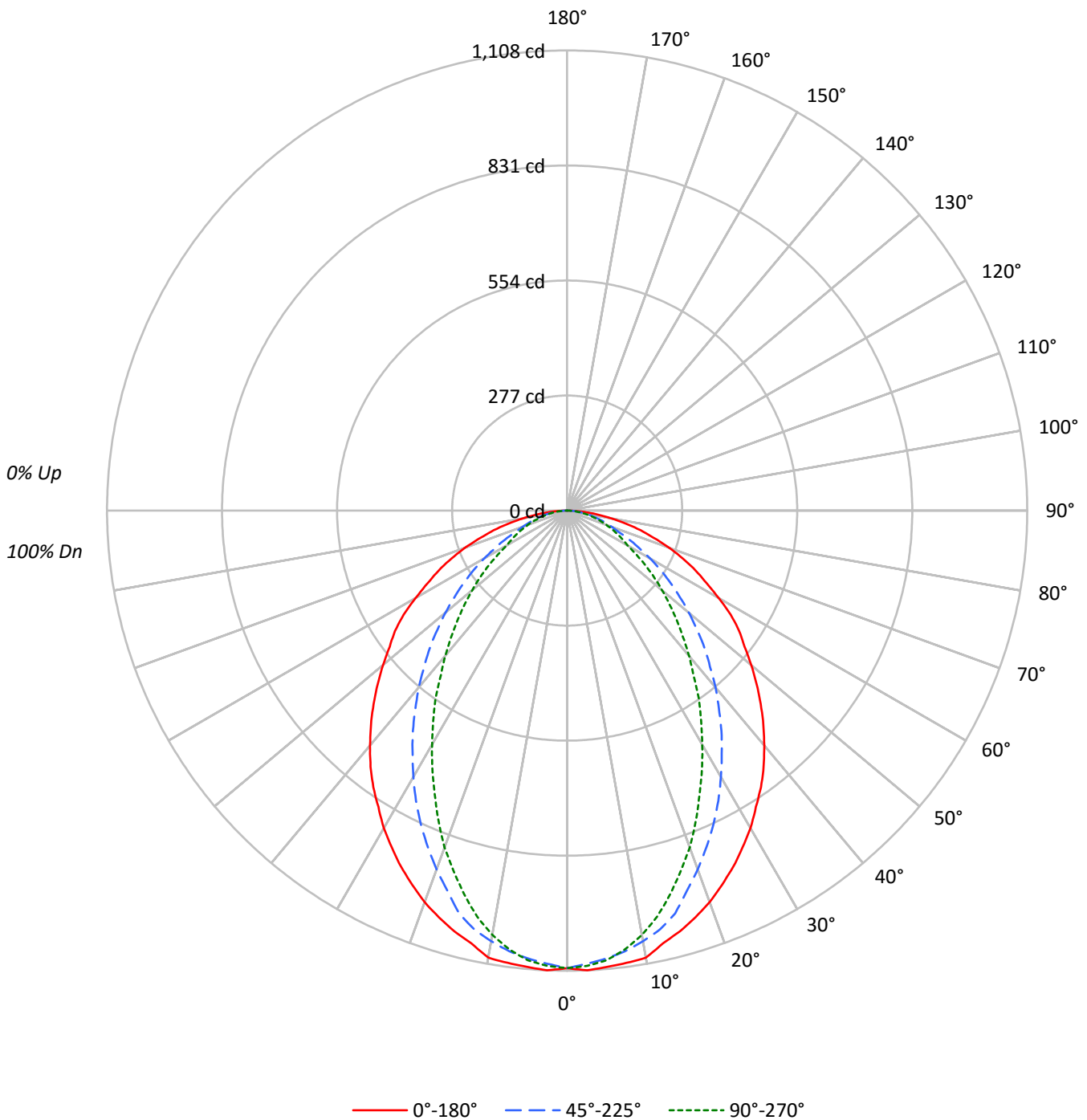
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	21626	21626	21626
5°	21731	21335	21417
10°	21791	20991	20676
15°	21316	20414	19449
20°	20963	19198	18028
25°	20498	18051	16336
30°	20015	16785	14749
35°	19490	15517	13238
40°	18919	14237	11693
45°	18297	12989	10352
50°	17676	11678	9098
55°	17317	10411	7882
60°	16548	9042	6592
65°	15848	7655	6182
70°	15037	6486	5757
75°	13857	6007	5286
80°	12299	5370	4782
85°	10473	4752	4279



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.2	4.7
10°-20°	281.5	12.8
20°-30°	388.0	17.7
30°-40°	415.1	18.9
40°-50°	378.5	17.3
50°-60°	298.3	13.6
60°-70°	196.5	9.0
70°-80°	102.6	4.7
80°-90°	27.7	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°	772.8	35.3
0°-40°	1187.9	54.2
0°-60°	1864.7	85.1
0°-90°	2191.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2191.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1102	1102	1102	1102	1102	
5°	1103	1096	1083	1091	1087	105
15°	1049	1033	1004	974	957	296
25°	946	910	833	781	754	436
35°	813	752	648	576	552	508
45°	659	582	468	396	373	509
55°	506	414	304	248	230	450
65°	341	252	165	136	133	337
75°	183	108	79	72	70	193
85°	46	23	21	20	19	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1101.7	1101.7	1101.7	1101.7	1101.7
2.5°	1108.0	1102.8	1092.2	1100.6	1097.5
5°	1102.8	1096.4	1082.7	1091.1	1086.9
7.5°	1098.5	1089.0	1070.0	1073.2	1065.8
10°	1093.2	1081.6	1053.1	1045.7	1037.3
12.5°	1066.8	1060.5	1033.0	1011.9	1001.4
15°	1048.9	1033.0	1004.5	973.9	957.0
17.5°	1026.7	1008.7	959.1	929.5	909.5
20°	1003.5	978.1	919.0	886.2	863.0
22.5°	974.9	947.5	876.7	835.5	809.1
25°	946.4	910.5	833.4	780.6	754.2
27.5°	914.7	873.5	788.0	729.9	702.4
30°	883.0	834.5	740.5	677.1	650.7
32.5°	846.1	794.3	692.9	623.2	600.0
35°	813.3	752.1	647.5	575.7	552.4
37.5°	777.4	710.9	600.0	527.1	499.6
40°	738.3	667.6	555.6	481.7	456.3
42.5°	699.3	625.3	509.1	435.2	413.0
45°	659.1	582.0	467.9	396.1	372.9
47.5°	619.0	540.8	423.6	356.0	334.8
50°	578.8	498.6	382.4	319.0	297.9
52.5°	538.7	456.3	342.2	282.0	264.1
55°	506.0	414.1	304.2	248.2	230.3
57.5°	466.9	373.9	267.2	215.5	197.5
60°	421.5	331.7	230.3	180.6	167.9
62.5°	378.1	292.6	195.4	155.3	150.0
65°	341.2	252.5	164.8	136.3	133.1
67.5°	301.0	214.4	133.1	119.4	116.2
70°	262.0	177.5	113.0	102.5	100.3
72.5°	218.6	140.5	96.1	86.6	84.5
75°	182.7	107.7	79.2	71.8	69.7
77.5°	143.7	78.2	62.3	57.0	56.0
80°	108.8	57.0	47.5	44.4	42.3
82.5°	72.9	39.1	32.7	31.7	30.6
85°	46.5	23.2	21.1	20.1	19.0
87.5°	19.0	10.6	9.5	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)