

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: P243221

Luminaire Tested: **S122RDR-H865D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-63)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-H865D830-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2697.6 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

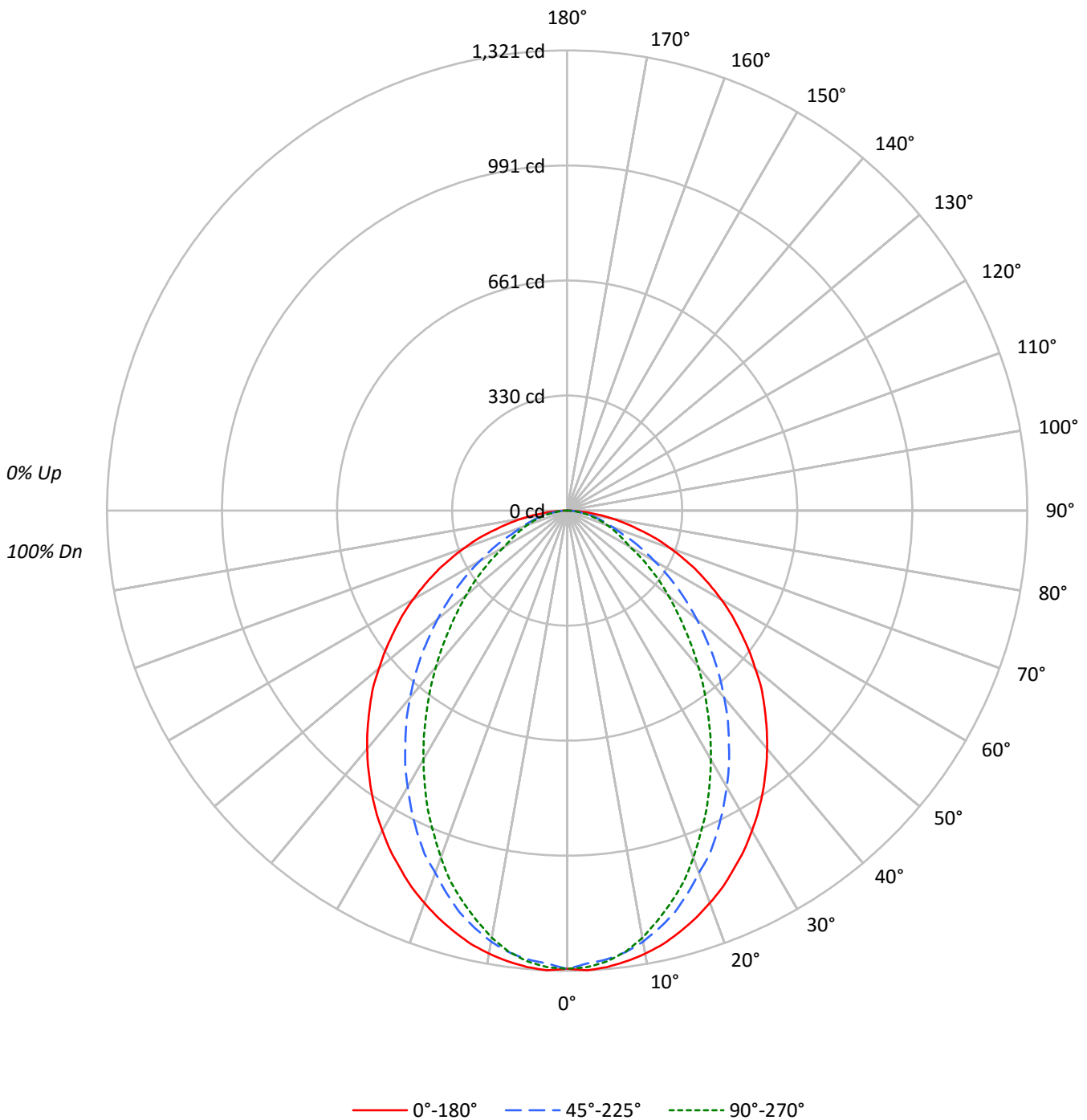
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25055	25055	25055
5°	25151	24738	24847
10°	24980	24301	24080
15°	24685	23543	22895
20°	24294	22429	21486
25°	23829	21420	19892
30°	23338	20145	18148
35°	22802	18816	16335
40°	22209	17440	14561
45°	21582	15990	12809
50°	20885	14393	11234
55°	20164	12815	9687
60°	19497	11025	7912
65°	18619	9312	7315
70°	17509	7713	6828
75°	15955	7014	6263
80°	14315	6220	5605
85°	11911	5201	4961



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	4.6
10°-20°	337.7	12.5
20°-30°	473.7	17.6
30°-40°	515.9	19.1
40°-50°	474.2	17.6
50°-60°	372.1	13.8
60°-70°	242.8	9.0
70°-80°	125.5	4.7
80°-90°	32.5	1.2
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°	934.5	34.6
0°-40°	1450.4	53.8
0°-60°	2296.8	85.1
0°-90°	2697.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2697.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1315	1315	1315	1315	1315	
5°	1315	1309	1294	1303	1300	125
15°	1252	1237	1194	1170	1161	353
25°	1134	1094	1019	969	946	523
35°	981	916	809	734	702	613
45°	801	720	594	507	476	619
55°	607	516	386	313	292	544
65°	413	313	207	168	162	408
75°	217	135	95	87	85	232
85°	54	26	24	23	23	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1315.4	1315.4	1315.4	1315.4	1315.4
2.5°	1321.0	1315.4	1301.7	1314.2	1312.0
5°	1315.4	1308.6	1293.8	1302.9	1299.5
7.5°	1305.2	1298.3	1279.0	1283.6	1277.9
10°	1291.5	1282.5	1256.4	1251.8	1245.0
12.5°	1274.5	1262.0	1226.8	1213.2	1204.1
15°	1251.8	1237.1	1193.9	1170.1	1161.0
17.5°	1226.8	1205.3	1151.9	1124.7	1115.6
20°	1198.5	1173.5	1106.5	1078.2	1060.0
22.5°	1169.0	1137.2	1068.0	1023.7	1002.1
25°	1133.8	1094.1	1019.2	969.2	946.5
27.5°	1099.7	1053.2	968.1	910.2	885.2
30°	1061.1	1010.1	915.9	848.9	825.1
32.5°	1022.6	963.5	864.8	792.2	764.9
35°	980.6	915.9	809.2	734.3	702.5
37.5°	937.4	870.5	758.1	675.3	644.6
40°	893.2	818.3	701.4	615.1	585.6
42.5°	847.8	771.7	648.0	559.5	531.1
45°	801.2	719.5	593.6	507.3	475.5
47.5°	757.0	668.5	537.9	456.2	425.6
50°	704.8	617.4	485.7	402.9	379.1
52.5°	657.1	566.3	434.7	355.2	334.8
55°	607.2	516.4	385.9	313.2	291.7
57.5°	560.6	464.2	337.1	271.2	250.8
60°	511.8	414.2	289.4	229.3	207.7
62.5°	460.8	363.2	247.4	190.7	183.9
65°	413.1	313.2	206.6	168.0	162.3
67.5°	362.0	266.7	164.6	147.5	141.9
70°	314.4	221.3	138.5	126.0	122.6
72.5°	267.8	178.2	116.9	106.7	103.3
75°	216.8	135.1	95.3	87.4	85.1
77.5°	172.5	95.3	76.0	70.4	68.1
80°	130.5	69.2	56.7	53.3	51.1
82.5°	89.7	46.5	39.7	37.5	36.3
85°	54.5	26.1	23.8	22.7	22.7
87.5°	21.6	10.2	10.2	9.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)