

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: P243225

Luminaire Tested: **S122RDR-H865D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243225
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-H865D835-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2862.0 lumens
Efficiency: N/A
Efficacy: 90.9 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

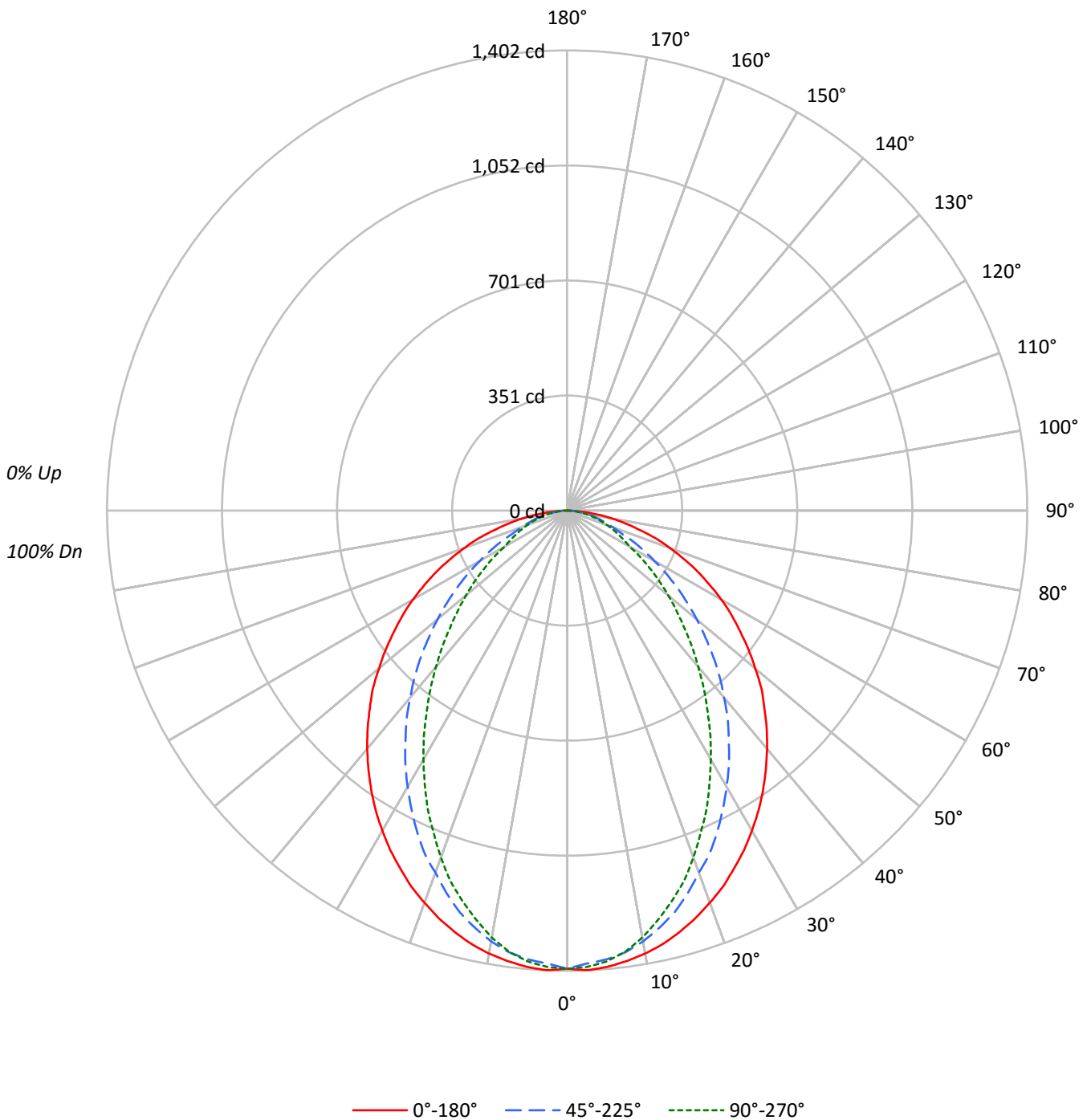
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26583	26583	26583
5°	26685	26247	26361
10°	26504	25780	25548
15°	26190	24979	24291
20°	25773	23797	22796
25°	25281	22725	21105
30°	24761	21372	19254
35°	24190	19963	17330
40°	23562	18502	15449
45°	22900	16963	13590
50°	22157	15273	11918
55°	21393	13596	10278
60°	20686	11695	8396
65°	19754	9875	7761
70°	18573	8181	7240
75°	16927	7440	6646
80°	15192	6603	5945
85°	12632	5529	5267



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	4.6
10°-20°	358.2	12.5
20°-30°	502.5	17.6
30°-40°	547.4	19.1
40°-50°	503.1	17.6
50°-60°	394.8	13.8
60°-70°	257.6	9.0
70°-80°	133.2	4.7
80°-90°	34.5	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°	991.5	34.6
0°-40°	1538.9	53.8
0°-60°	2436.8	85.1
0°-90°	2862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1396	1396	1396	1396	1396	
5°	1396	1388	1373	1382	1379	132
15°	1328	1312	1267	1241	1232	374
25°	1203	1161	1081	1028	1004	554
35°	1040	972	858	779	745	651
45°	850	763	630	538	504	656
55°	644	548	409	332	310	577
65°	438	332	219	178	172	433
75°	230	143	101	93	90	246
85°	58	28	25	24	24	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1395.6	1395.6	1395.6	1395.6	1395.6
2.5°	1401.6	1395.6	1381.1	1394.3	1391.9
5°	1395.6	1388.3	1372.7	1382.3	1378.7
7.5°	1384.7	1377.5	1357.0	1361.8	1355.8
10°	1370.3	1360.6	1332.9	1328.1	1320.9
12.5°	1352.2	1339.0	1301.6	1287.2	1277.5
15°	1328.1	1312.5	1266.7	1241.4	1231.8
17.5°	1301.6	1278.8	1222.2	1193.3	1183.6
20°	1271.5	1245.0	1174.0	1143.9	1124.6
22.5°	1240.2	1206.5	1133.1	1086.1	1063.2
25°	1202.9	1160.8	1081.3	1028.3	1004.2
27.5°	1166.8	1117.4	1027.1	965.7	939.2
30°	1125.8	1071.6	971.7	900.7	875.4
32.5°	1084.9	1022.3	917.5	840.5	811.6
35°	1040.3	971.7	858.5	779.1	745.3
37.5°	994.6	923.5	804.3	716.4	683.9
40°	947.6	868.2	744.1	652.6	621.3
42.5°	899.5	818.8	687.5	593.6	563.5
45°	850.1	763.4	629.7	538.2	504.5
47.5°	803.1	709.2	570.7	484.0	451.5
50°	747.7	655.0	515.4	427.5	402.2
52.5°	697.2	600.8	461.2	376.9	355.2
55°	644.2	547.9	409.4	332.3	309.5
57.5°	594.8	492.5	357.6	287.8	266.1
60°	543.0	439.5	307.0	243.2	220.4
62.5°	488.9	385.3	262.5	202.3	195.1
65°	438.3	332.3	219.1	178.2	172.2
67.5°	384.1	283.0	174.6	156.5	150.5
70°	333.5	234.8	146.9	133.7	130.0
72.5°	284.2	189.0	124.0	113.2	109.6
75°	230.0	143.3	101.1	92.7	90.3
77.5°	183.0	101.1	80.7	74.7	72.2
80°	138.5	73.5	60.2	56.6	54.2
82.5°	95.1	49.4	42.1	39.7	38.5
85°	57.8	27.7	25.3	24.1	24.1
87.5°	22.9	10.8	10.8	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)