

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: P243230

Luminaire Tested: **S122RDR-H865D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243230
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-H865D840-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2890.3 lumens
Efficiency: N/A
Efficacy: 91.8 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

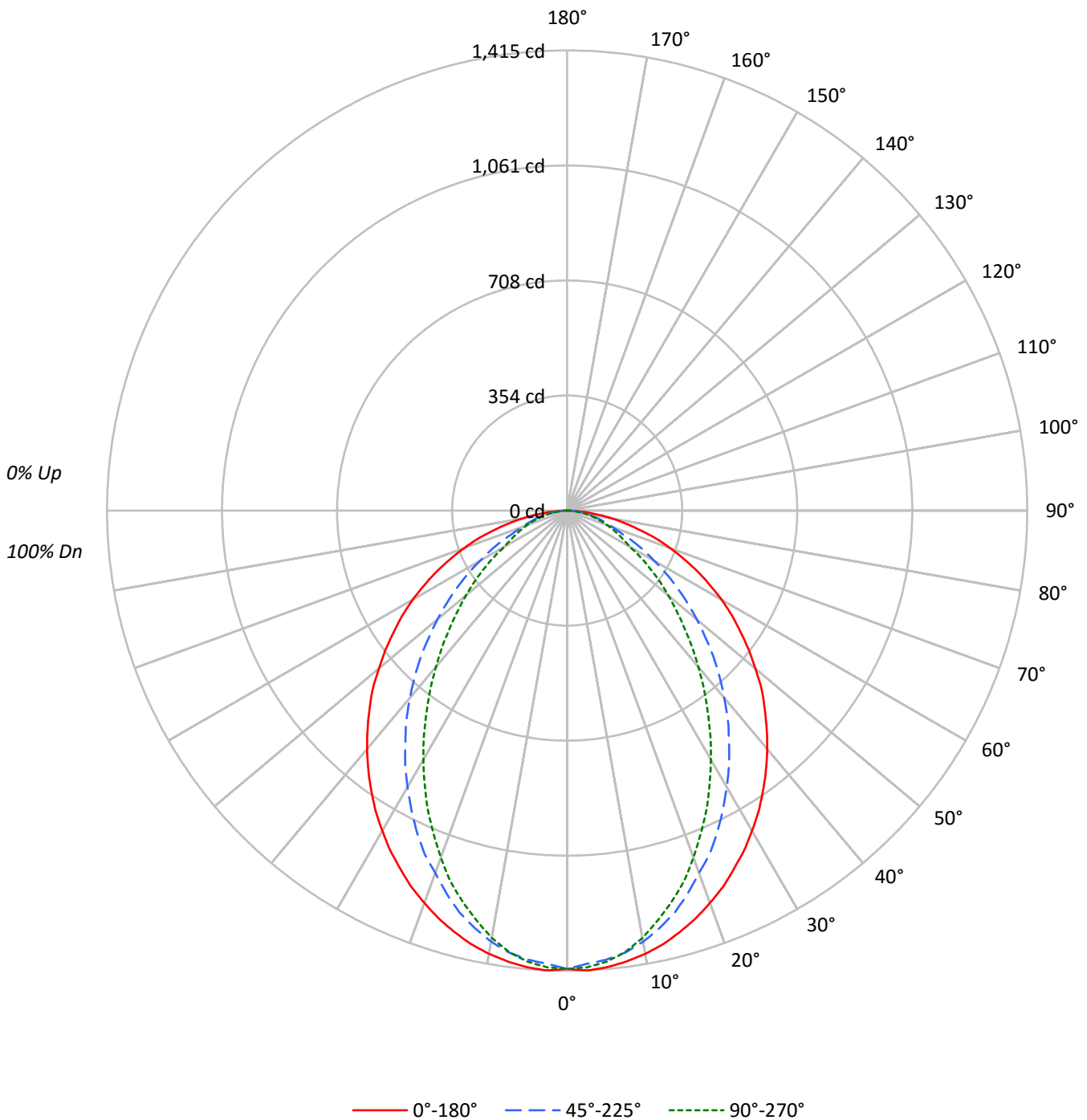
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	26844	26844	26844
5°	26946	26505	26621
10°	26765	26036	25800
15°	26448	25225	24529
20°	26029	24032	23021
25°	25531	22948	21313
30°	25005	21583	19443
35°	24430	20160	17503
40°	23796	18686	15600
45°	23126	17132	13725
50°	22376	15421	12034
55°	21602	13728	10378
60°	20892	11813	8476
65°	19948	9974	7838
70°	18757	8259	7312
75°	17096	7514	6712
80°	15335	6669	6000
85°	12763	5573	5311



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.0	4.6
10°-20°	361.8	12.5
20°-30°	507.5	17.6
30°-40°	552.8	19.1
40°-50°	508.1	17.6
50°-60°	398.7	13.8
60°-70°	260.1	9.0
70°-80°	134.5	4.7
80°-90°	34.8	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°	1001.3	34.6
0°-40°	1554.0	53.8
0°-60°	2460.9	85.1
0°-90°	2890.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2890.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1409	1409	1409	1409	1409	
5°	1409	1402	1386	1396	1392	134
15°	1341	1325	1279	1254	1244	378
25°	1215	1172	1092	1038	1014	560
35°	1051	981	867	787	753	657
45°	858	771	636	544	510	663
55°	650	553	413	336	312	583
65°	443	336	221	180	174	437
75°	232	145	102	94	91	248
85°	58	28	26	24	24	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1409.3	1409.3	1409.3	1409.3	1409.3
2.5°	1415.4	1409.3	1394.7	1408.1	1405.7
5°	1409.3	1402.0	1386.2	1395.9	1392.3
7.5°	1398.4	1391.1	1370.4	1375.3	1369.2
10°	1383.8	1374.1	1346.1	1341.2	1333.9
12.5°	1365.5	1352.2	1314.5	1299.9	1290.2
15°	1341.2	1325.4	1279.2	1253.7	1243.9
17.5°	1314.5	1291.4	1234.2	1205.0	1195.3
20°	1284.1	1257.3	1185.6	1155.2	1135.7
22.5°	1252.5	1218.4	1144.2	1096.8	1073.7
25°	1214.8	1172.2	1091.9	1038.4	1014.1
27.5°	1178.3	1128.4	1037.2	975.2	948.5
30°	1136.9	1082.2	981.3	909.6	884.0
32.5°	1095.6	1032.4	926.6	848.8	819.6
35°	1050.6	981.3	867.0	786.7	752.7
37.5°	1004.4	932.7	812.3	723.5	690.7
40°	957.0	876.7	751.5	659.1	627.4
42.5°	908.3	826.9	694.3	599.5	569.1
45°	858.5	770.9	636.0	543.5	509.5
47.5°	811.1	716.2	576.4	488.8	456.0
50°	755.1	661.5	520.4	431.7	406.1
52.5°	704.1	606.8	465.7	380.6	358.7
55°	650.5	553.3	413.4	335.6	312.5
57.5°	600.7	497.3	361.1	290.6	268.7
60°	548.4	443.8	310.1	245.6	222.5
62.5°	493.7	389.1	265.1	204.3	197.0
65°	442.6	335.6	221.3	180.0	173.9
67.5°	387.9	285.8	176.3	158.1	152.0
70°	336.8	237.1	148.3	135.0	131.3
72.5°	287.0	190.9	125.2	114.3	110.7
75°	232.3	144.7	102.1	93.6	91.2
77.5°	184.8	102.1	81.5	75.4	73.0
80°	139.8	74.2	60.8	57.2	54.7
82.5°	96.1	49.9	42.6	40.1	38.9
85°	58.4	28.0	25.5	24.3	24.3
87.5°	23.1	10.9	10.9	9.7	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)