

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: P243137

Luminaire Tested: **S122DR-H865D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243137
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-48)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-H865D935-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2862.3 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

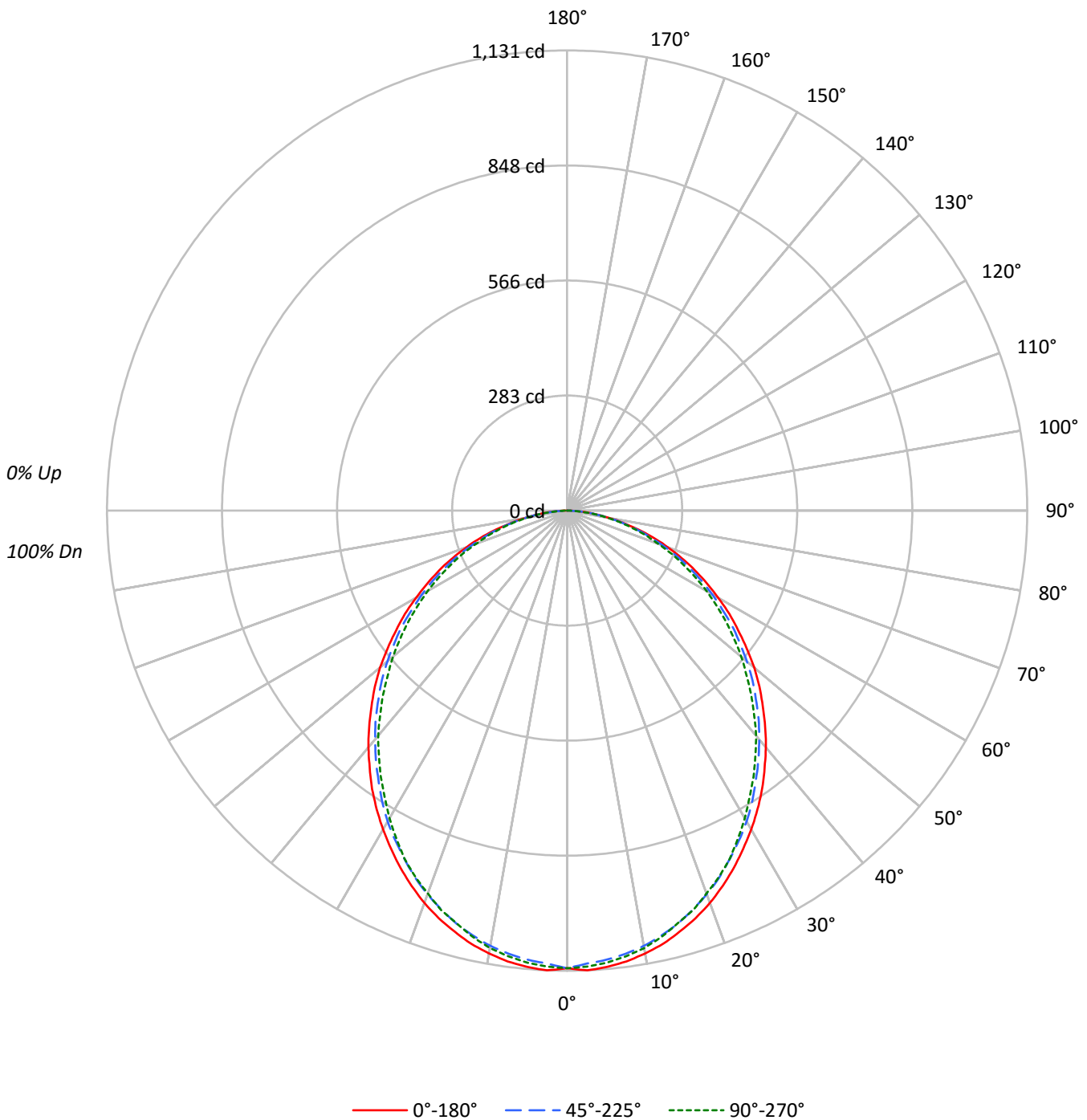
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21427	21427	21427
5°	21528	21191	21329
10°	21376	21015	21115
15°	21118	20729	20710
20°	20805	20343	20301
25°	20372	19871	19850
30°	19907	19406	19199
35°	19430	18802	18563
40°	18895	18251	17967
45°	18320	17679	17232
50°	17789	17080	16559
55°	17043	16458	15837
60°	16312	15680	15086
65°	15608	14860	14206
70°	14664	13917	13221
75°	13350	12820	12209
80°	11594	11254	10805
85°	9966	8829	8152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.9	3.7
10°-20°	298.1	10.4
20°-30°	438.3	15.3
30°-40°	509.0	17.8
40°-50°	508.3	17.8
50°-60°	442.7	15.5
60°-70°	327.4	11.4
70°-80°	184.6	6.4
80°-90°	48.1	1.7
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°	842.4	29.4
0°-40°	1351.3	47.2
0°-60°	2302.3	80.4
0°-90°	2862.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2862.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1125	1125	1125	1125	1125	
5°	1126	1121	1108	1118	1116	107
15°	1071	1066	1051	1055	1050	302
25°	969	961	946	944	944	446
35°	836	826	809	801	798	522
45°	680	673	656	646	640	525
55°	513	509	496	482	477	460
65°	346	341	330	319	315	342
75°	181	180	174	168	166	193
85°	46	44	40	38	37	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1124.9	1124.9	1124.9	1124.9	1124.9
2.5°	1131.1	1125.9	1114.5	1123.8	1121.7
5°	1125.9	1120.7	1108.3	1117.6	1115.5
7.5°	1117.6	1112.4	1098.9	1108.3	1105.2
10°	1105.2	1098.9	1086.5	1092.7	1091.7
12.5°	1090.6	1084.4	1069.9	1075.1	1073.0
15°	1070.9	1065.8	1051.2	1055.4	1050.2
17.5°	1050.2	1041.9	1028.4	1032.6	1029.5
20°	1026.4	1018.1	1003.6	1005.6	1001.5
22.5°	998.4	990.1	976.6	976.6	974.5
25°	969.3	961.0	945.5	944.5	944.5
27.5°	937.2	929.9	914.4	911.3	909.2
30°	905.1	898.8	882.3	876.0	872.9
32.5°	870.9	862.6	847.0	839.8	834.6
35°	835.6	826.3	808.6	801.4	798.3
37.5°	797.2	787.9	772.4	766.1	759.9
40°	759.9	751.6	734.0	724.7	722.6
42.5°	720.5	712.2	696.7	686.3	680.1
45°	680.1	672.8	656.3	645.9	639.7
47.5°	640.7	632.4	617.9	605.5	597.2
50°	600.3	592.0	576.4	561.9	558.8
52.5°	555.7	550.5	535.0	521.5	517.3
55°	513.2	509.0	495.6	482.1	476.9
57.5°	472.7	467.6	452.0	441.6	435.4
60°	428.2	425.1	411.6	400.2	396.0
62.5°	386.7	382.6	371.1	359.7	354.6
65°	346.3	341.1	329.7	319.3	315.2
67.5°	304.8	299.6	290.3	282.0	277.8
70°	263.3	259.2	249.9	242.6	237.4
72.5°	222.9	218.8	210.5	203.2	202.2
75°	181.4	180.4	174.2	168.0	165.9
77.5°	143.1	142.0	137.9	134.8	132.7
80°	105.7	105.7	102.6	99.5	98.5
82.5°	72.6	73.6	70.5	68.4	68.4
85°	45.6	43.5	40.4	38.4	37.3
87.5°	18.7	15.6	14.5	11.4	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)