

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: P243113

Luminaire Tested: **S122DR-H865D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243113
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-H865D927-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2633.5 lumens
Efficiency: N/A
Efficacy: 83.6 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

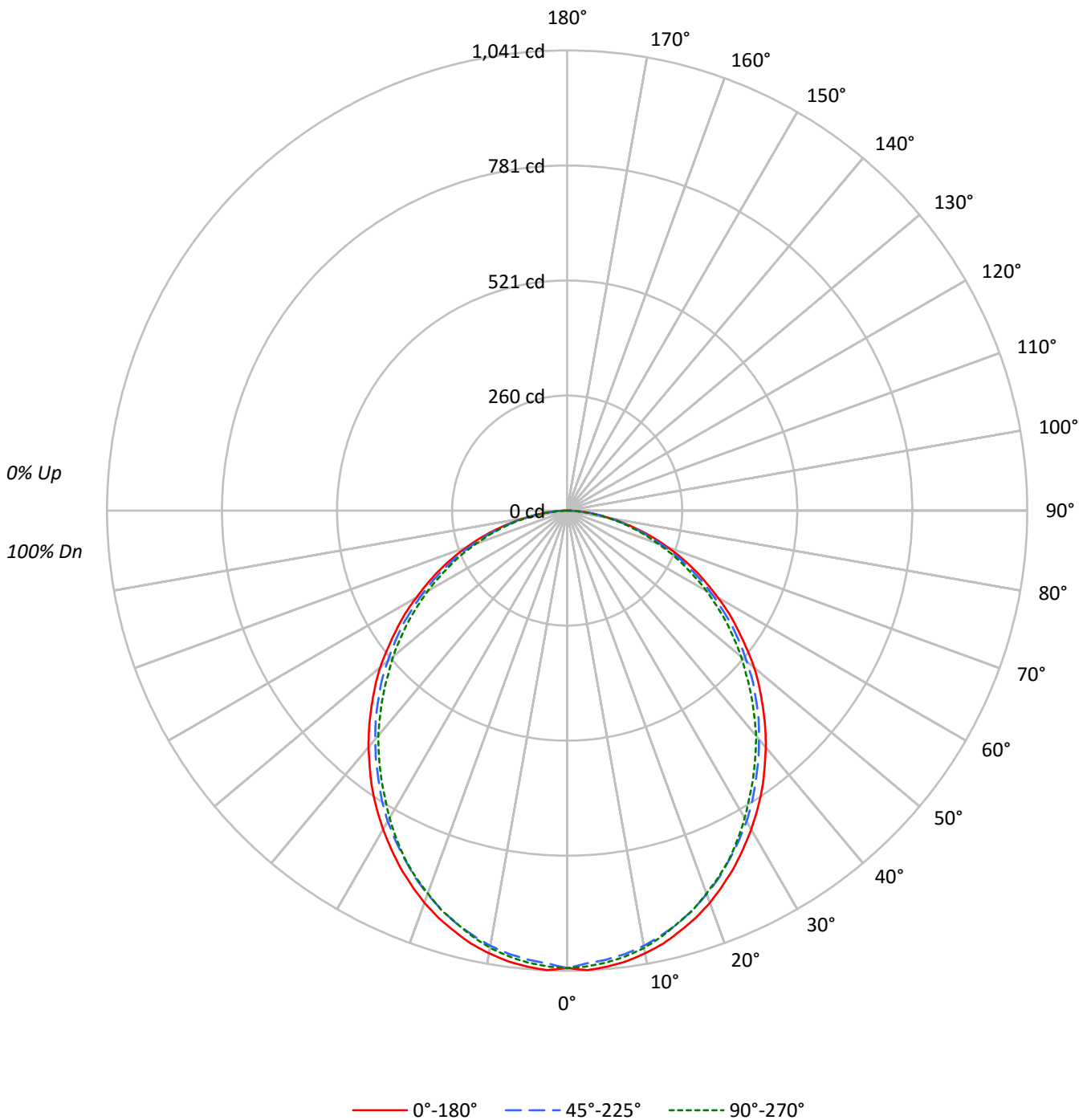
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243113

CATALOG NUMBER: S122DR-H865D927-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P243113

CATALOG NUMBER: S122DR-H865D927-X4F0-XX-UDD-F-W

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°	19712	19712	19712
5°	19807	19497	19625
10°	19666	19336	19427
15°	19430	19073	19055
20°	19141	18715	18677
25°	18745	18283	18264
30°	18315	17853	17666
35°	17877	17300	17079
40°	17386	16791	16530
45°	16855	16265	15853
50°	16366	15714	15234
55°	15681	15140	14572
60°	15006	14427	13882
65°	14360	13670	13071
70°	13494	12804	12163
75°	12283	11790	11231
80°	10673	10355	9938
85°	9179	8130	7496



TEST NUMBER: P243113

CATALOG NUMBER: S122DR-H865D927-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.4	3.7
10°-20°	274.3	10.4
20°-30°	403.3	15.3
30°-40°	468.3	17.8
40°-50°	467.6	17.8
50°-60°	407.3	15.5
60°-70°	301.2	11.4
70°-80°	169.8	6.4
80°-90°	44.3	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°	775.0	29.4
0°-40°	1243.3	47.2
0°-60°	2118.2	80.4
0°-90°	2633.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2633.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1035	1035	1035	1035	1035	
5°	1036	1031	1020	1028	1026	98
15°	985	981	967	971	966	278
25°	892	884	870	869	869	411
35°	769	760	744	737	734	480
45°	626	619	604	594	588	483
55°	472	468	456	444	439	423
65°	319	314	303	294	290	315
75°	167	166	160	154	153	178
85°	42	40	37	35	34	48
90°	0	0	0	0	0	



TEST NUMBER: P243113

CATALOG NUMBER: S122DR-H865D927-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1034.9	1034.9	1034.9	1034.9	1034.9
2.5°	1040.7	1035.9	1025.4	1034.0	1032.1
5°	1035.9	1031.1	1019.7	1028.3	1026.4
7.5°	1028.3	1023.5	1011.1	1019.7	1016.8
10°	1016.8	1011.1	999.7	1005.4	1004.4
12.5°	1003.5	997.7	984.4	989.2	987.3
15°	985.3	980.6	967.2	971.0	966.3
17.5°	966.3	958.6	946.2	950.1	947.2
20°	944.3	936.7	923.3	925.3	921.4
22.5°	918.6	910.9	898.5	898.5	896.6
25°	891.9	884.2	869.9	869.0	869.0
27.5°	862.3	855.6	841.3	838.4	836.5
30°	832.7	827.0	811.7	806.0	803.2
32.5°	801.2	793.6	779.3	772.6	767.9
35°	768.8	760.2	744.0	737.3	734.5
37.5°	733.5	724.9	710.6	704.9	699.2
40°	699.2	691.6	675.3	666.8	664.8
42.5°	662.9	655.3	641.0	631.5	625.7
45°	625.7	619.1	603.8	594.3	588.5
47.5°	589.5	581.9	568.5	557.1	549.4
50°	552.3	544.7	530.3	517.0	514.1
52.5°	511.3	506.5	492.2	479.8	476.0
55°	472.2	468.3	455.9	443.5	438.8
57.5°	435.0	430.2	415.9	406.3	400.6
60°	393.9	391.1	378.7	368.2	364.4
62.5°	355.8	352.0	341.5	331.0	326.2
65°	318.6	313.8	303.3	293.8	290.0
67.5°	280.4	275.7	267.1	259.5	255.6
70°	242.3	238.5	229.9	223.2	218.4
72.5°	205.1	201.3	193.6	187.0	186.0
75°	166.9	166.0	160.2	154.5	152.6
77.5°	131.6	130.7	126.9	124.0	122.1
80°	97.3	97.3	94.4	91.6	90.6
82.5°	66.8	67.7	64.9	63.0	63.0
85°	42.0	40.1	37.2	35.3	34.3
87.5°	17.2	14.3	13.4	10.5	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)