

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: P242282

Luminaire Tested: **S122DR-S865D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242282
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-S865D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3008.8 lumens
Efficiency: N/A
Efficacy: 86.5 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

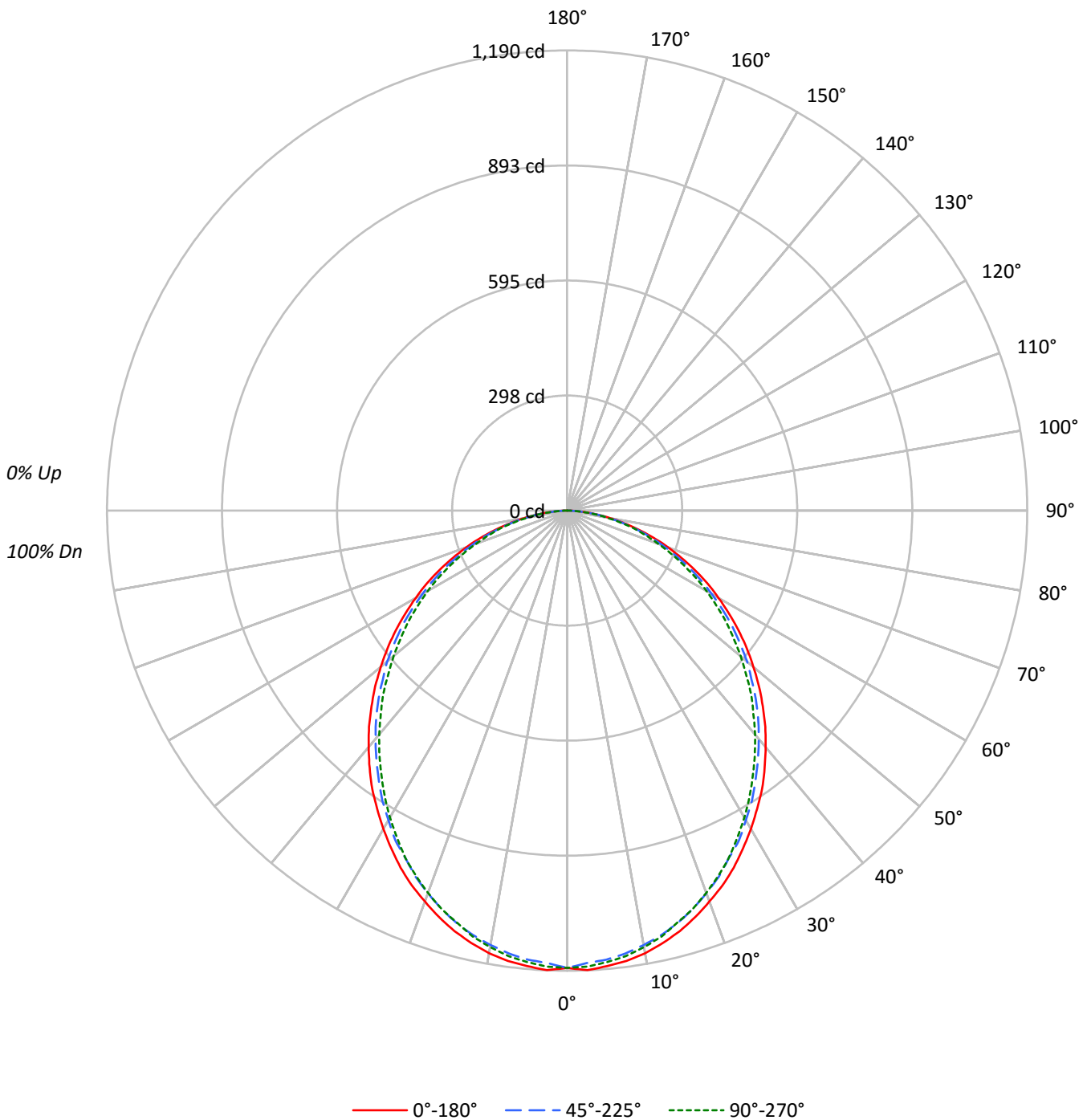
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242282

CATALOG NUMBER: S122DR-S865D940-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P242282

CATALOG NUMBER: S122DR-S865D940-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	27	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22526	22526	22526
5°	22612	22287	22417
10°	22479	22061	22169
15°	22200	21774	21751
20°	21805	21344	21322
25°	21414	20817	20817
30°	20910	20334	20158
35°	20439	19753	19460
40°	19850	19171	18803
45°	19268	18595	18134
50°	18633	17993	17353
55°	17976	17295	16654
60°	17242	16461	15855
65°	16451	15631	14914
70°	15454	14630	13934
75°	14057	13475	13137
80°	12472	12099	11474
85°	10184	9682	8698



TEST NUMBER: P242282

CATALOG NUMBER: S122DR-S865D940-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.3	3.7
10°-20°	313.2	10.4
20°-30°	460.2	15.3
30°-40°	534.5	17.8
40°-50°	533.9	17.7
50°-60°	465.5	15.5
60°-70°	344.1	11.4
70°-80°	194.7	6.5
80°-90°	51.4	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°	884.7	29.4
0°-40°	1419.2	47.2
0°-60°	2418.6	80.4
0°-90°	3008.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3008.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1183	1183	1183	1183	1183	
5°	1183	1178	1166	1175	1172	112
15°	1126	1119	1104	1109	1103	317
25°	1019	1010	990	993	990	469
35°	879	868	850	843	837	549
45°	715	707	690	678	673	552
55°	541	534	521	507	502	484
65°	365	358	347	337	331	361
75°	191	189	183	176	178	204
85°	47	46	44	41	40	55
90°	0	0	0	0	0	



TEST NUMBER: P242282

CATALOG NUMBER: S122DR-S865D940-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1182.6	1182.6	1182.6	1182.6	1182.6
2.5°	1189.5	1183.8	1171.3	1182.6	1180.4
5°	1182.6	1178.1	1165.6	1174.7	1172.4
7.5°	1174.7	1167.9	1155.3	1164.4	1162.2
10°	1162.2	1154.2	1140.6	1149.7	1146.2
12.5°	1145.1	1138.3	1124.6	1130.3	1128.1
15°	1125.8	1119.0	1104.2	1108.7	1103.0
17.5°	1101.9	1095.1	1080.3	1086.0	1080.3
20°	1075.7	1068.9	1053.0	1056.4	1051.9
22.5°	1049.6	1039.4	1024.6	1024.6	1022.3
25°	1018.9	1009.8	990.5	992.7	990.5
27.5°	984.8	976.8	962.0	958.6	952.9
30°	950.7	941.6	924.5	921.1	916.5
32.5°	914.3	907.4	889.3	882.4	877.9
35°	879.0	867.6	849.5	842.6	836.9
37.5°	839.2	829.0	810.8	802.8	797.1
40°	798.3	789.2	771.0	760.8	756.2
42.5°	758.5	749.4	731.2	719.8	713.0
45°	715.3	707.3	690.3	677.7	673.2
47.5°	673.2	665.2	647.0	634.5	627.7
50°	628.8	623.2	607.2	591.3	585.6
52.5°	585.6	577.7	562.9	550.4	542.4
55°	541.3	534.5	520.8	507.2	501.5
57.5°	496.9	491.2	476.5	462.8	458.3
60°	452.6	448.0	432.1	419.6	416.2
62.5°	409.4	401.4	390.0	378.7	374.1
65°	365.0	358.2	346.8	336.6	330.9
67.5°	319.5	313.9	303.6	295.7	291.1
70°	277.5	272.9	262.7	254.7	250.2
72.5°	234.3	229.7	224.0	216.1	212.6
75°	191.0	188.8	183.1	176.3	178.5
77.5°	152.4	147.8	145.6	142.1	138.7
80°	113.7	112.6	110.3	106.9	104.6
82.5°	77.3	77.3	76.2	71.6	71.6
85°	46.6	45.5	44.3	40.9	39.8
87.5°	20.5	18.2	15.9	12.5	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)