

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: P243642

Luminaire Tested: **S125DR-H850D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-51)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-H850D840-X4F0-XX-UDD-F-W
Description: DEFINE 5 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: 3317.4 lumens
Efficiency: N/A
Efficacy: 140.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

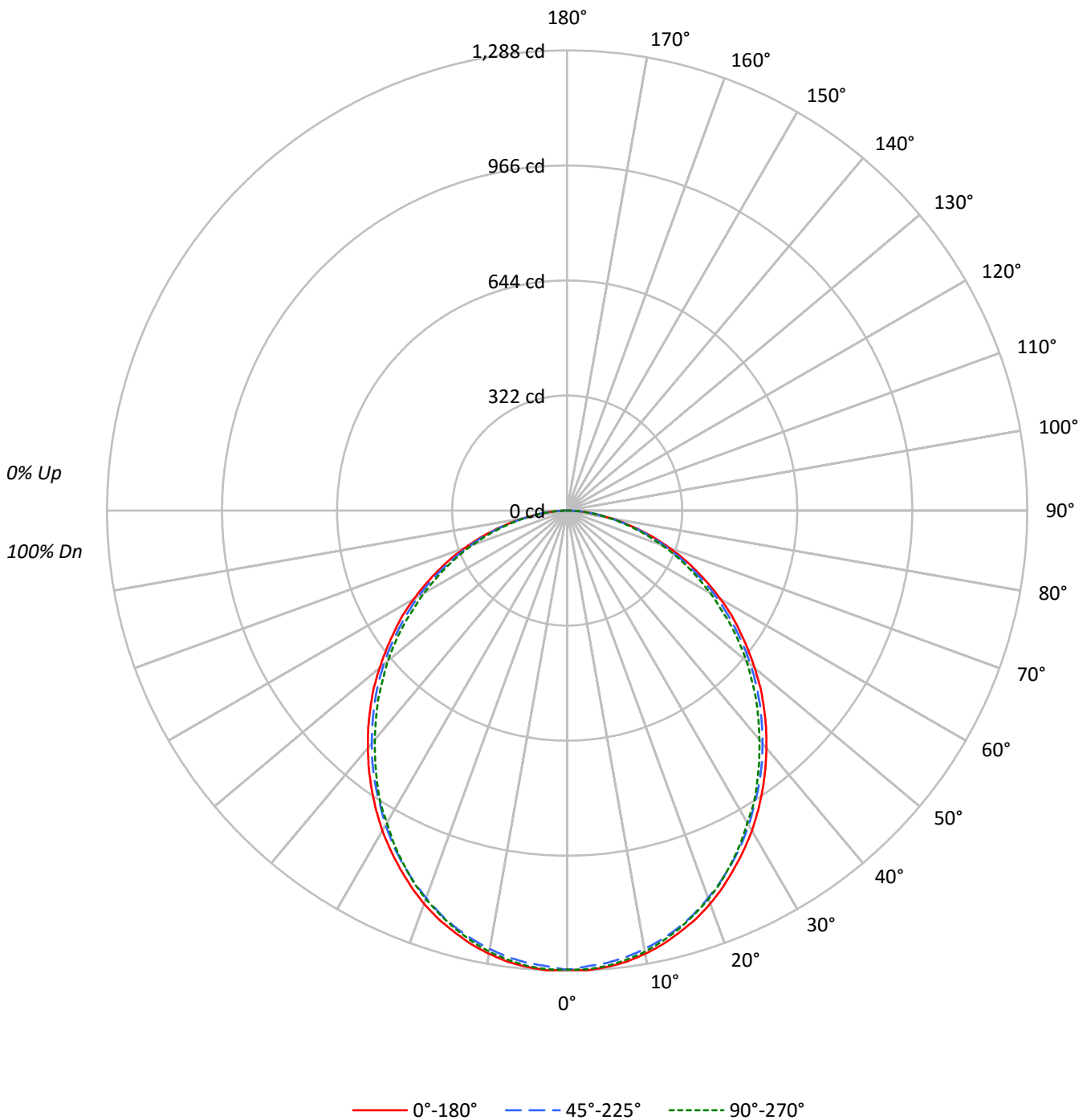
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243642

CATALOG NUMBER: S125DR-H850D840-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P243642

CATALOG NUMBER: S125DR-H850D840-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	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	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	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9134	9134	9134
5°	9149	9068	9129
10°	9091	8996	9050
15°	8984	8887	8915
20°	8858	8729	8750
25°	8673	8548	8533
30°	8489	8341	8280
35°	8271	8124	8050
40°	8049	7891	7768
45°	7828	7658	7515
50°	7569	7413	7246
55°	7315	7115	6928
60°	7036	6836	6594
65°	6707	6470	6248
70°	6290	6055	5858
75°	5800	5618	5360
80°	5055	5018	4899
85°	4379	4379	4151



TEST NUMBER: P243642

CATALOG NUMBER: S125DR-H850D840-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.2	3.7
10°-20°	342.1	10.3
20°-30°	504.4	15.2
30°-40°	587.4	17.7
40°-50°	588.6	17.7
50°-60°	514.5	15.5
60°-70°	381.9	11.5
70°-80°	216.6	6.5
80°-90°	60.7	1.8
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°	967.7	29.2
0°-40°	1555.1	46.9
0°-60°	2658.2	80.1
0°-90°	3317.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3317.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1285	1285	1285	1285	1285	
5°	1282	1280	1271	1280	1280	122
15°	1221	1219	1208	1214	1212	344
25°	1106	1102	1090	1093	1088	510
35°	953	948	936	931	928	596
45°	779	777	762	750	748	601
55°	590	589	574	562	559	528
65°	399	396	385	376	372	395
75°	211	207	205	201	195	224
85°	54	54	54	52	51	62
90°	0	0	0	0	0	



TEST NUMBER: P243642

CATALOG NUMBER: S125DR-H850D840-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1285.2	1285.2	1285.2	1285.2	1285.2
2.5°	1288.0	1286.1	1276.7	1286.1	1285.2
5°	1282.3	1280.4	1271.0	1280.4	1279.5
7.5°	1273.8	1271.0	1260.6	1270.1	1268.2
10°	1259.7	1257.8	1246.5	1254.0	1254.0
12.5°	1242.7	1239.9	1228.6	1235.2	1234.2
15°	1221.0	1219.2	1207.8	1214.4	1211.6
17.5°	1198.4	1193.7	1183.3	1189.0	1185.2
20°	1171.1	1167.3	1154.1	1158.8	1156.9
22.5°	1140.0	1135.2	1123.0	1125.8	1124.9
25°	1106.0	1102.2	1090.0	1092.8	1088.1
27.5°	1071.1	1066.4	1055.1	1055.1	1050.4
30°	1034.4	1029.6	1016.4	1016.4	1008.9
32.5°	994.8	991.0	975.0	974.0	972.1
35°	953.3	947.6	936.3	930.6	927.8
37.5°	911.8	907.1	894.8	887.3	882.5
40°	867.5	864.6	850.5	843.9	837.3
42.5°	824.1	821.3	806.2	794.9	792.0
45°	778.8	776.9	761.9	750.5	747.7
47.5°	733.6	731.7	716.6	704.3	699.6
50°	684.5	684.5	670.4	658.1	655.3
52.5°	637.4	636.5	622.3	610.1	607.2
55°	590.3	589.3	574.2	562.0	559.1
57.5°	545.9	540.3	527.1	517.6	508.2
60°	495.0	492.2	480.9	468.6	463.9
62.5°	447.9	444.1	432.8	422.4	415.8
65°	398.8	396.0	384.7	376.2	371.5
67.5°	352.6	348.9	337.6	331.0	327.2
70°	302.7	299.8	291.4	282.9	281.9
72.5°	258.4	254.6	249.9	242.3	238.6
75°	211.2	207.4	204.6	200.8	195.2
77.5°	165.9	164.1	162.2	159.3	156.5
80°	123.5	123.5	122.6	120.7	119.7
82.5°	87.7	88.6	85.8	83.9	83.9
85°	53.7	53.7	53.7	51.9	50.9
87.5°	26.4	23.6	23.6	21.7	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)