

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: P242782

Luminaire Tested: **S125DR-S850D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-S850D840-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3322.3 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

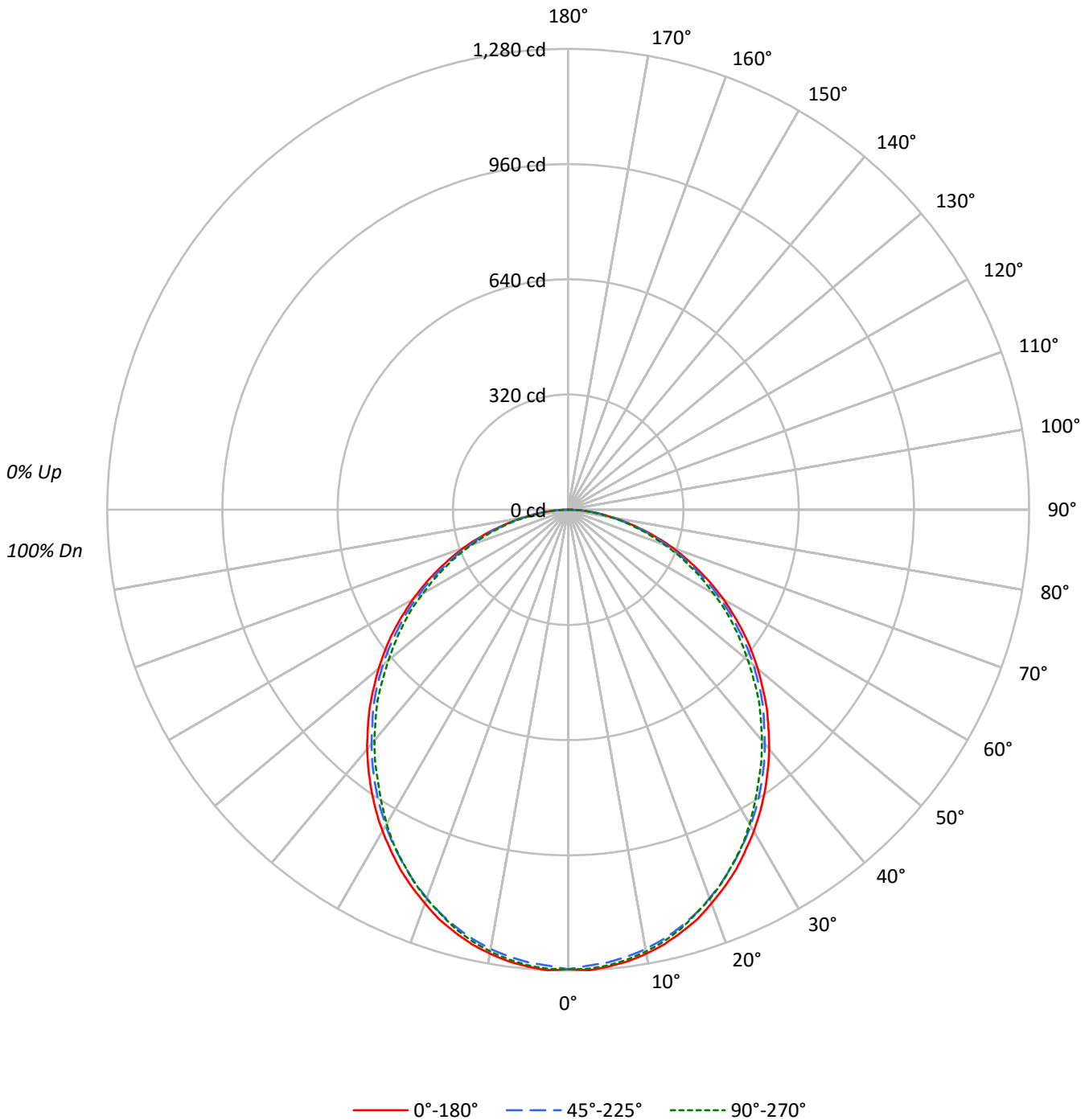
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	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	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9073	9073	9073
5°	9092	9006	9064
10°	9037	8943	8994
15°	8939	8835	8872
20°	8799	8684	8700
25°	8648	8506	8498
30°	8462	8313	8271
35°	8263	8105	7991
40°	8058	7880	7768
45°	7836	7674	7521
50°	7593	7426	7203
55°	7358	7145	6945
60°	7077	6861	6617
65°	6742	6522	6301
70°	6421	6128	5918
75°	5852	5657	5462
80°	5206	5124	5002
85°	4526	4616	4363



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.4	3.6
10°-20°	340.2	10.2
20°-30°	502.3	15.1
30°-40°	586.0	17.6
40°-50°	588.6	17.7
50°-60°	516.7	15.6
60°-70°	384.8	11.6
70°-80°	219.8	6.6
80°-90°	63.5	1.9
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°	963.0	29.0
0°-40°	1549.0	46.6
0°-60°	2654.2	79.9
0°-90°	3322.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3322.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1276	1276	1276	1276	1276	
5°	1274	1272	1262	1271	1270	121
15°	1215	1212	1201	1206	1206	343
25°	1103	1098	1085	1087	1084	507
35°	952	948	934	929	921	596
45°	780	776	764	751	748	601
55°	594	591	577	568	560	530
65°	401	399	388	379	375	398
75°	213	211	206	203	199	227
85°	56	57	57	56	54	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1276.5	1276.5	1276.5	1276.5	1276.5
2.5°	1280.5	1277.5	1267.4	1277.5	1276.5
5°	1274.4	1272.4	1262.3	1271.4	1270.4
7.5°	1265.4	1263.3	1252.2	1261.3	1260.3
10°	1252.2	1250.2	1239.1	1247.2	1246.2
12.5°	1236.1	1232.0	1221.9	1228.0	1228.0
15°	1214.9	1211.8	1200.7	1205.8	1205.8
17.5°	1192.7	1187.6	1176.5	1182.6	1177.5
20°	1163.4	1161.3	1148.2	1155.3	1150.2
22.5°	1134.1	1130.0	1117.9	1122.0	1118.9
25°	1102.8	1097.7	1084.6	1086.6	1083.6
27.5°	1066.4	1063.4	1050.3	1051.3	1048.2
30°	1031.1	1028.0	1012.9	1010.9	1007.8
32.5°	992.7	987.6	974.5	970.5	964.4
35°	952.3	948.3	934.1	929.1	921.0
37.5°	910.9	905.8	892.7	885.7	880.6
40°	868.5	863.4	849.3	840.2	837.2
42.5°	823.0	819.0	804.9	796.8	791.7
45°	779.6	775.6	763.5	751.3	748.3
47.5°	732.2	733.2	718.0	705.9	698.8
50°	686.7	683.7	671.6	658.4	651.4
52.5°	640.3	638.2	625.1	614.0	605.9
55°	593.8	590.8	576.6	567.5	560.5
57.5°	544.3	543.3	531.2	519.1	516.0
60°	497.9	493.8	482.7	472.6	465.5
62.5°	449.4	446.4	437.3	426.2	421.1
65°	400.9	398.9	387.8	378.7	374.7
67.5°	353.5	349.4	341.3	333.3	331.2
70°	309.0	304.0	294.9	288.8	284.8
72.5°	260.5	257.5	252.5	245.4	241.4
75°	213.1	211.1	206.0	203.0	198.9
77.5°	168.6	167.6	164.6	162.6	159.6
80°	127.2	127.2	125.2	124.2	122.2
82.5°	90.9	88.9	88.9	86.8	86.8
85°	55.5	56.6	56.6	55.5	53.5
87.5°	27.3	27.3	26.3	26.3	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)