

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: P242773

Luminaire Tested: **S125DR-S850D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242773
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-S850D830-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3100.8 lumens
Efficiency: N/A
Efficacy: 117.5 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

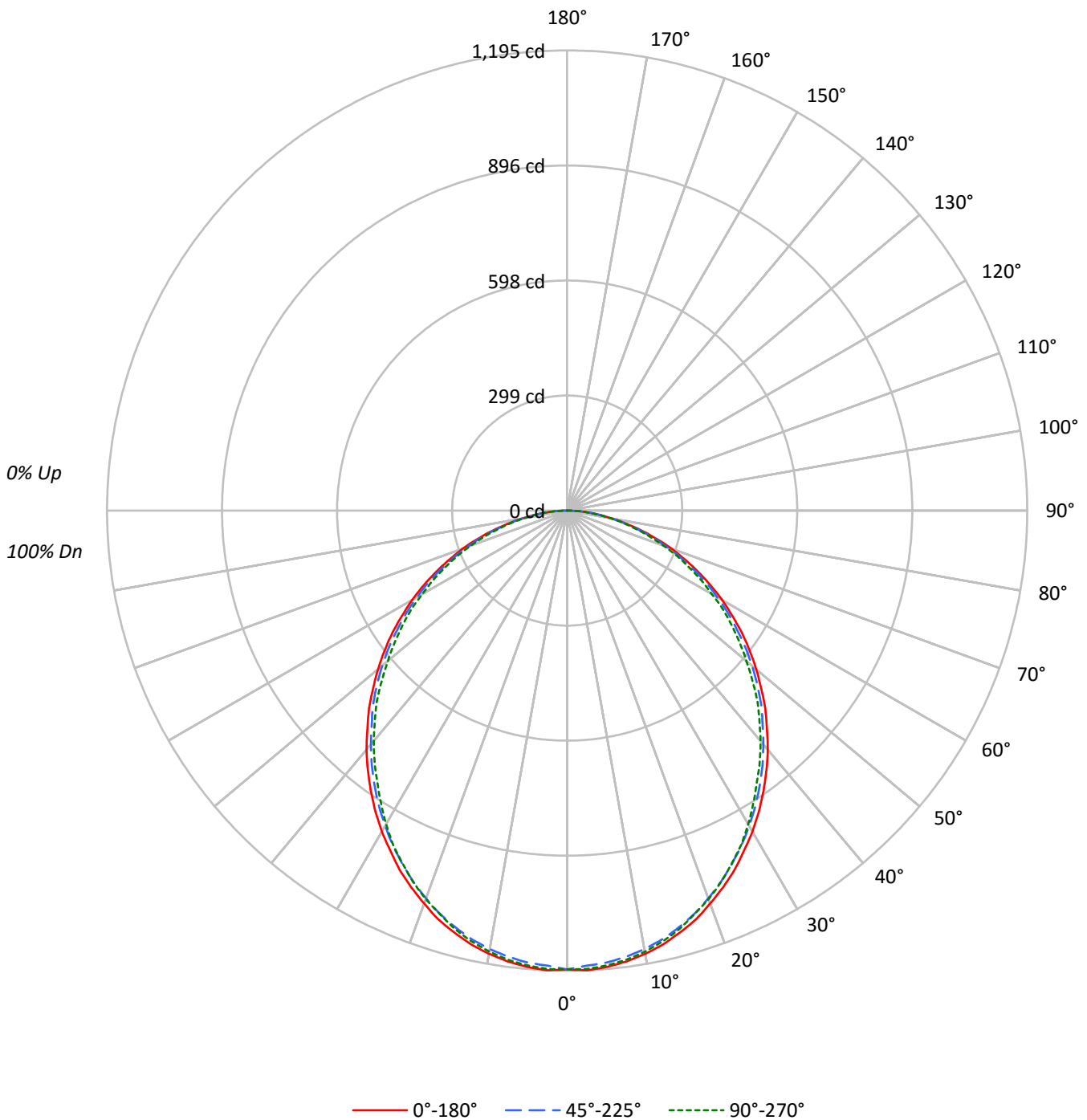
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8468	8468	8468
5°	8486	8406	8459
10°	8435	8346	8394
15°	8343	8246	8281
20°	8212	8106	8120
25°	8072	7939	7931
30°	7897	7759	7720
35°	7712	7565	7458
40°	7521	7355	7250
45°	7313	7163	7020
50°	7086	6931	6722
55°	6867	6669	6482
60°	6606	6404	6176
65°	6293	6086	5881
70°	5993	5719	5523
75°	5462	5281	5099
80°	4862	4785	4666
85°	4224	4306	4077



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	3.6
10°-20°	317.5	10.2
20°-30°	468.8	15.1
30°-40°	547.0	17.6
40°-50°	549.3	17.7
50°-60°	482.2	15.6
60°-70°	359.2	11.6
70°-80°	205.1	6.6
80°-90°	59.2	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°	898.8	29.0
0°-40°	1445.7	46.6
0°-60°	2477.3	79.9
0°-90°	3100.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3100.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1191	1191	1191	1191	1191	
5°	1190	1188	1178	1187	1186	113
15°	1134	1131	1121	1125	1125	320
25°	1029	1024	1012	1014	1011	474
35°	889	885	872	867	860	556
45°	728	724	713	701	698	561
55°	554	551	538	530	523	495
65°	374	372	362	354	350	371
75°	199	197	192	190	186	212
85°	52	53	53	52	50	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1191.4	1191.4	1191.4	1191.4	1191.4
2.5°	1195.1	1192.3	1182.9	1192.3	1191.4
5°	1189.5	1187.6	1178.2	1186.7	1185.7
7.5°	1181.0	1179.1	1168.8	1177.2	1176.3
10°	1168.8	1166.9	1156.5	1164.0	1163.1
12.5°	1153.7	1149.9	1140.5	1146.1	1146.1
15°	1133.9	1131.1	1120.7	1125.4	1125.4
17.5°	1113.1	1108.4	1098.1	1103.7	1099.0
20°	1085.8	1083.9	1071.7	1078.3	1073.6
22.5°	1058.5	1054.7	1043.4	1047.2	1044.3
25°	1029.3	1024.5	1012.3	1014.2	1011.3
27.5°	995.3	992.5	980.2	981.2	978.4
30°	962.3	959.5	945.4	943.5	940.7
32.5°	926.5	921.8	909.6	905.8	900.1
35°	888.8	885.0	871.9	867.1	859.6
37.5°	850.2	845.5	833.2	826.6	821.9
40°	810.6	805.9	792.7	784.2	781.4
42.5°	768.2	764.4	751.2	743.7	739.0
45°	727.6	723.9	712.6	701.3	698.4
47.5°	683.3	684.3	670.1	658.8	652.2
50°	640.9	638.1	626.8	614.5	607.9
52.5°	597.6	595.7	583.4	573.1	565.5
55°	554.2	551.4	538.2	529.7	523.1
57.5°	508.0	507.1	495.8	484.5	481.6
60°	464.7	460.9	450.5	441.1	434.5
62.5°	419.4	416.6	408.1	397.8	393.0
65°	374.2	372.3	361.9	353.5	349.7
67.5°	329.9	326.1	318.6	311.0	309.2
70°	288.4	283.7	275.2	269.6	265.8
72.5°	243.2	240.3	235.6	229.0	225.3
75°	198.9	197.0	192.3	189.5	185.7
77.5°	157.4	156.5	153.6	151.7	148.9
80°	118.8	118.8	116.9	115.9	114.0
82.5°	84.8	82.9	82.9	81.1	81.1
85°	51.8	52.8	52.8	51.8	50.0
87.5°	25.4	25.4	24.5	24.5	22.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)