

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: P243633

Luminaire Tested: **S125DR-H850D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243633
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-H850D830-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3096.2 lumens
Efficiency: N/A
Efficacy: 131.2 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

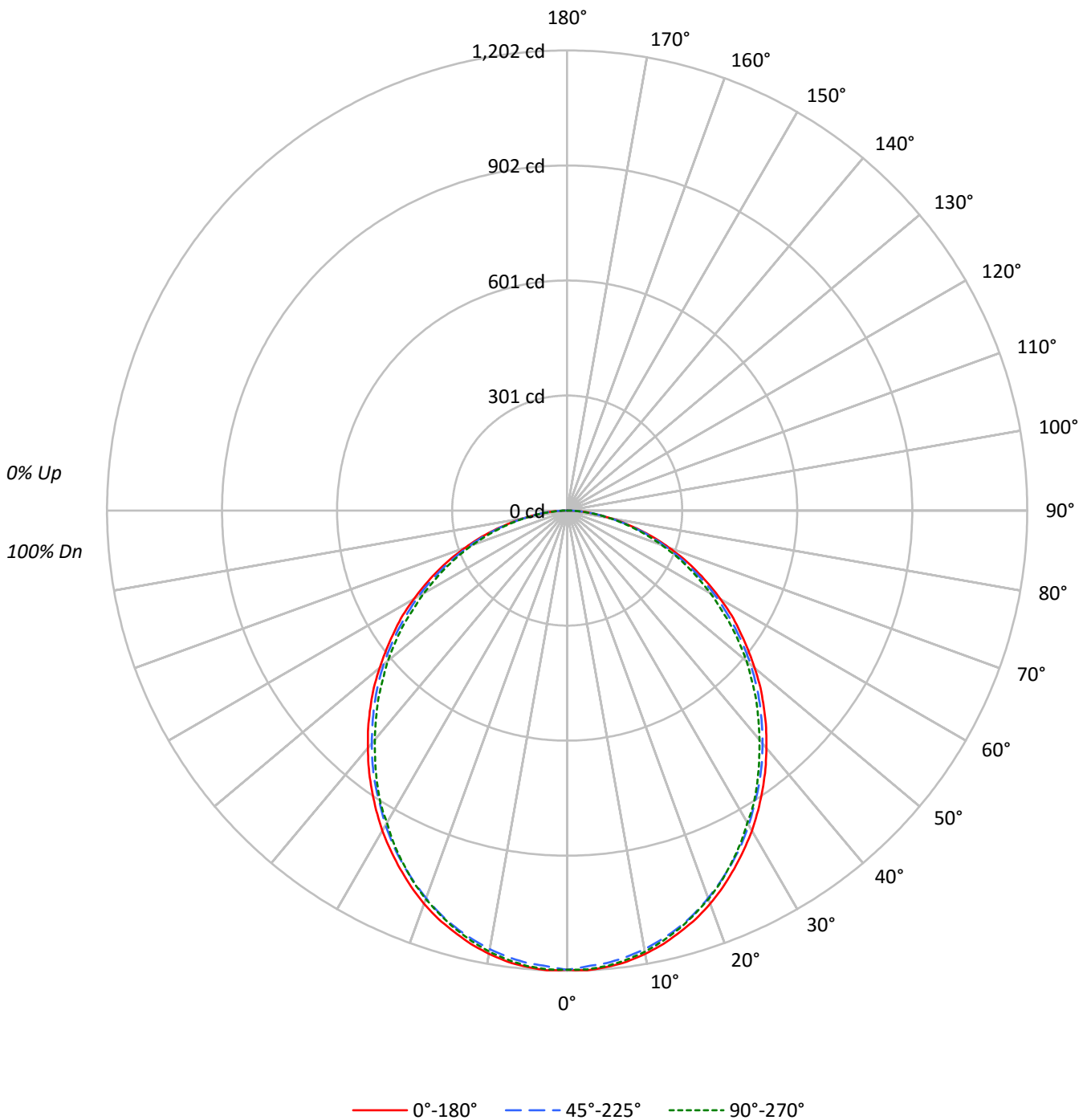
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	8525	8525	8525
5°	8539	8464	8520
10°	8485	8396	8447
15°	8385	8295	8320
20°	8267	8147	8167
25°	8095	7978	7964
30°	7923	7786	7728
35°	7719	7582	7514
40°	7511	7365	7251
45°	7306	7147	7015
50°	7064	6918	6763
55°	6826	6640	6467
60°	6567	6380	6155
65°	6261	6039	5831
70°	5870	5650	5467
75°	5412	5245	5003
80°	4719	4682	4576
85°	4094	4094	3874



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	3.7
10°-20°	319.3	10.3
20°-30°	470.8	15.2
30°-40°	548.2	17.7
40°-50°	549.3	17.7
50°-60°	480.2	15.5
60°-70°	356.4	11.5
70°-80°	202.1	6.5
80°-90°	56.7	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°	903.2	29.2
0°-40°	1451.5	46.9
0°-60°	2481.0	80.1
0°-90°	3096.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3096.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1200	1200	1200	1200	1200	
5°	1197	1195	1186	1195	1194	114
15°	1140	1138	1127	1134	1131	321
25°	1032	1029	1017	1020	1016	476
35°	890	884	874	869	866	557
45°	727	725	711	700	698	561
55°	551	550	536	524	522	493
65°	372	370	359	351	347	369
75°	197	194	191	187	182	209
85°	50	50	50	48	48	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1199.5	1199.5	1199.5	1199.5	1199.5
2.5°	1202.1	1200.4	1191.6	1200.4	1199.5
5°	1196.8	1195.1	1186.3	1195.1	1194.2
7.5°	1188.9	1186.3	1176.6	1185.4	1183.6
10°	1175.7	1174.0	1163.4	1170.4	1170.4
12.5°	1159.9	1157.2	1146.7	1152.8	1152.0
15°	1139.6	1137.9	1127.3	1133.5	1130.8
17.5°	1118.5	1114.1	1104.4	1109.7	1106.2
20°	1093.0	1089.5	1077.2	1081.6	1079.8
22.5°	1064.0	1059.6	1048.1	1050.8	1049.9
25°	1032.3	1028.8	1017.3	1020.0	1015.6
27.5°	999.7	995.3	984.8	984.8	980.4
30°	965.4	961.0	948.7	948.7	941.6
32.5°	928.4	924.9	910.0	909.1	907.3
35°	889.7	884.4	873.9	868.6	866.0
37.5°	851.0	846.6	835.2	828.1	823.7
40°	809.6	807.0	793.8	787.6	781.5
42.5°	769.2	766.5	752.4	741.9	739.2
45°	726.9	725.1	711.1	700.5	697.9
47.5°	684.7	682.9	668.8	657.4	653.0
50°	638.9	638.9	625.7	614.3	611.6
52.5°	594.9	594.0	580.8	569.4	566.7
55°	550.9	550.0	535.9	524.5	521.9
57.5°	509.5	504.3	491.9	483.1	474.3
60°	462.0	459.4	448.8	437.4	433.0
62.5°	418.0	414.5	403.9	394.3	388.1
65°	372.3	369.6	359.1	351.1	346.7
67.5°	329.1	325.6	315.1	308.9	305.4
70°	282.5	279.9	271.9	264.0	263.1
72.5°	241.1	237.6	233.2	226.2	222.6
75°	197.1	193.6	191.0	187.4	182.2
77.5°	154.9	153.1	151.4	148.7	146.1
80°	115.3	115.3	114.4	112.6	111.8
82.5°	81.8	82.7	80.1	78.3	78.3
85°	50.2	50.2	50.2	48.4	47.5
87.5°	24.6	22.0	22.0	20.2	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)