

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: P243736

Luminaire Tested: **S125RDR-H850D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243736
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDR-H850D830-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED 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: 2940.7 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

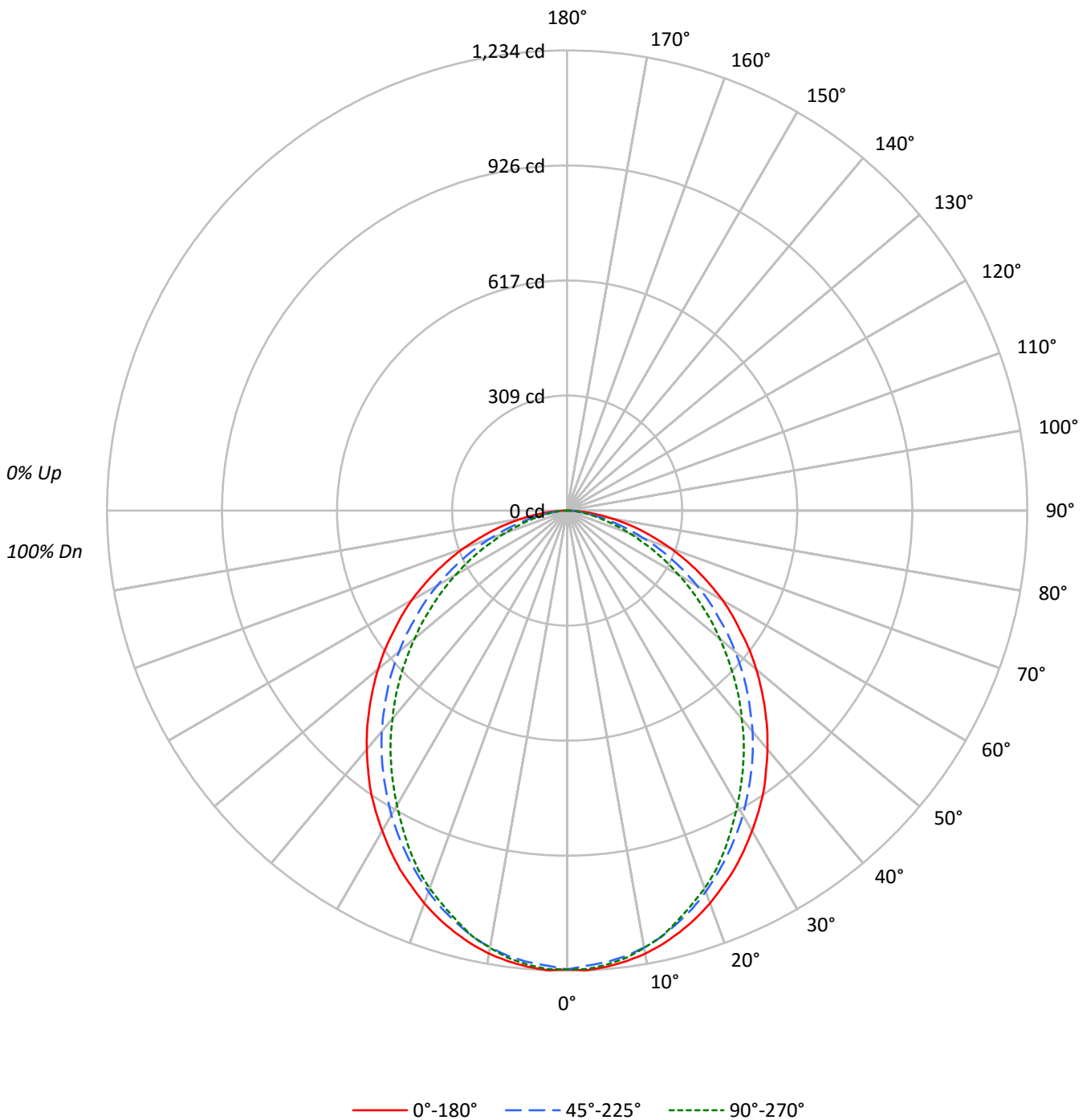
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8744	8744	8744
5°	8758	8671	8721
10°	8707	8587	8593
15°	8606	8424	8385
20°	8473	8227	8153
25°	8323	7985	7854
30°	8140	7735	7490
35°	7972	7460	7147
40°	7756	7177	6761
45°	7536	6855	6359
50°	7318	6500	5907
55°	7056	6106	5431
60°	6843	5704	4917
65°	6512	5225	4351
70°	6145	4572	3711
75°	5654	3817	3021
80°	4969	2955	2484
85°	4232	2438	2300



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	3.9
10°-20°	324.6	11.0
20°-30°	472.3	16.1
30°-40°	540.9	18.4
40°-50°	529.3	18.0
50°-60°	446.9	15.2
60°-70°	312.9	10.6
70°-80°	158.9	5.4
80°-90°	39.1	1.3
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°	912.8	31.0
0°-40°	1453.7	49.4
0°-60°	2429.8	82.6
0°-90°	2940.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2940.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1230	1230	1230	1230	1230	
5°	1228	1225	1215	1223	1222	117
15°	1170	1165	1145	1144	1140	330
25°	1061	1049	1018	1008	1002	488
35°	919	897	860	834	824	574
45°	750	725	682	646	633	579
55°	569	545	493	453	438	511
65°	387	357	311	272	259	384
75°	206	180	139	116	110	218
85°	52	33	30	28	28	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1230.3	1230.3	1230.3	1230.3	1230.3
2.5°	1233.8	1231.2	1221.5	1230.3	1230.3
5°	1227.6	1225.0	1215.3	1223.2	1222.4
7.5°	1218.8	1216.2	1204.8	1212.7	1210.0
10°	1206.5	1203.0	1189.8	1194.2	1190.7
12.5°	1189.8	1186.3	1170.4	1172.2	1170.4
15°	1169.6	1165.2	1144.9	1144.0	1139.6
17.5°	1146.7	1140.5	1118.5	1115.9	1108.8
20°	1120.3	1112.4	1087.7	1082.4	1078.0
22.5°	1090.4	1082.4	1053.4	1045.5	1042.8
25°	1061.3	1049.0	1018.2	1007.6	1001.5
27.5°	1027.0	1012.9	981.2	967.2	956.6
30°	991.8	976.0	942.5	924.0	912.6
32.5°	955.7	937.2	901.2	878.3	868.6
35°	918.8	896.8	859.8	834.3	823.7
37.5°	876.5	854.5	817.6	787.6	777.9
40°	836.0	813.2	773.5	741.0	728.7
42.5°	793.8	770.0	726.9	692.6	682.0
45°	749.8	725.1	682.0	645.9	632.7
47.5°	705.8	681.1	636.3	600.2	583.5
50°	661.8	635.4	587.9	550.9	534.2
52.5°	617.8	588.7	542.1	502.5	487.5
55°	569.4	544.7	492.8	453.2	438.3
57.5°	526.3	499.0	449.7	409.2	392.5
60°	481.4	451.5	401.3	361.7	345.9
62.5°	433.9	403.9	355.5	315.9	301.9
65°	387.2	357.3	310.7	271.9	258.7
67.5°	340.6	312.4	265.8	229.7	214.7
70°	295.7	266.6	220.0	187.4	178.6
72.5°	248.2	225.3	178.6	149.6	142.6
75°	205.9	180.4	139.0	116.2	110.0
77.5°	162.8	138.2	103.0	87.1	81.8
80°	121.4	100.3	72.2	62.5	60.7
82.5°	83.6	63.4	47.5	45.8	44.9
85°	51.9	33.4	29.9	28.2	28.2
87.5°	22.0	14.1	14.1	13.2	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)