

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: G3-1802-639-12

Luminaire Tested: **S125DR-S850D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-12
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-S850D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3289.9 lumens
Efficiency: N/A
Efficacy: 124.6 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

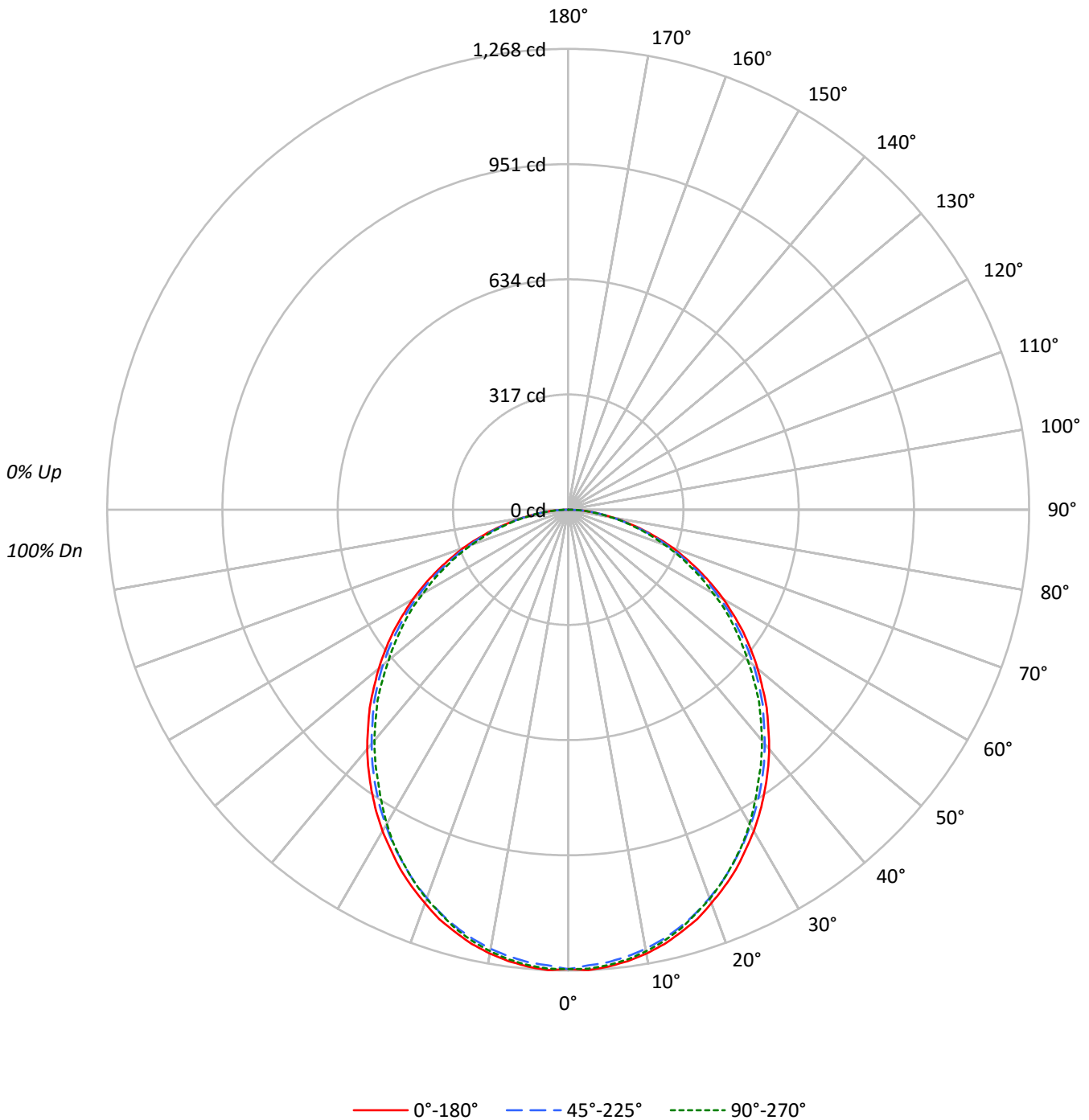
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	8984	8984	8984
5°	9004	8918	8975
10°	8949	8855	8906
15°	8852	8749	8786
20°	8713	8600	8615
25°	8564	8422	8415
30°	8379	8231	8190
35°	8182	8026	7913
40°	7979	7803	7691
45°	7760	7599	7448
50°	7519	7353	7132
55°	7286	7075	6877
60°	7008	6795	6553
65°	6677	6458	6239
70°	6359	6068	5860
75°	5794	5602	5410
80°	5157	5075	4952
85°	4485	4567	4322



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.3	3.6
10°-20°	336.9	10.2
20°-30°	497.4	15.1
30°-40°	580.3	17.6
40°-50°	582.8	17.7
50°-60°	511.6	15.6
60°-70°	381.1	11.6
70°-80°	217.7	6.6
80°-90°	62.8	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°	953.6	29.0
0°-40°	1533.9	46.6
0°-60°	2628.3	79.9
0°-90°	3289.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3289.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1262	1260	1250	1259	1258	120
15°	1203	1200	1189	1194	1194	339
25°	1092	1087	1074	1076	1073	502
35°	943	939	925	920	912	590
45°	772	768	756	744	741	595
55°	588	585	571	562	555	525
65°	397	395	384	375	371	394
75°	211	209	204	201	197	225
85°	55	56	56	55	53	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1264	1264	1264	1264	1264
2.5°	1268	1265	1255	1265	1264
5°	1262	1260	1250	1259	1258
7.5°	1253	1251	1240	1249	1248
10°	1240	1238	1227	1235	1234
12.5°	1224	1220	1210	1216	1216
15°	1203	1200	1189	1194	1194
17.5°	1181	1176	1165	1171	1166
20°	1152	1150	1137	1144	1139
22.5°	1123	1119	1107	1111	1108
25°	1092	1087	1074	1076	1073
27.5°	1056	1053	1040	1041	1038
30°	1021	1018	1003	1001	998
32.5°	983	978	965	961	955
35°	943	939	925	920	912
37.5°	902	897	884	877	872
40°	860	855	841	832	829
42.5°	815	811	797	789	784
45°	772	768	756	744	741
47.5°	725	726	711	699	692
50°	680	677	665	652	645
52.5°	634	632	619	608	600
55°	588	585	571	562	555
57.5°	539	538	526	514	511
60°	493	489	478	468	461
62.5°	445	442	433	422	417
65°	397	395	384	375	371
67.5°	350	346	338	330	328
70°	306	301	292	286	282
72.5°	258	255	250	243	239
75°	211	209	204	201	197
77.5°	167	166	163	161	158
80°	126	126	124	123	121
82.5°	90	88	88	86	86
85°	55	56	56	55	53
87.5°	27	27	26	26	24
90°	0	0	0	0	0

(END OF REPORT)