

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: G3-1802-639-17

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-17
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-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3159.8 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

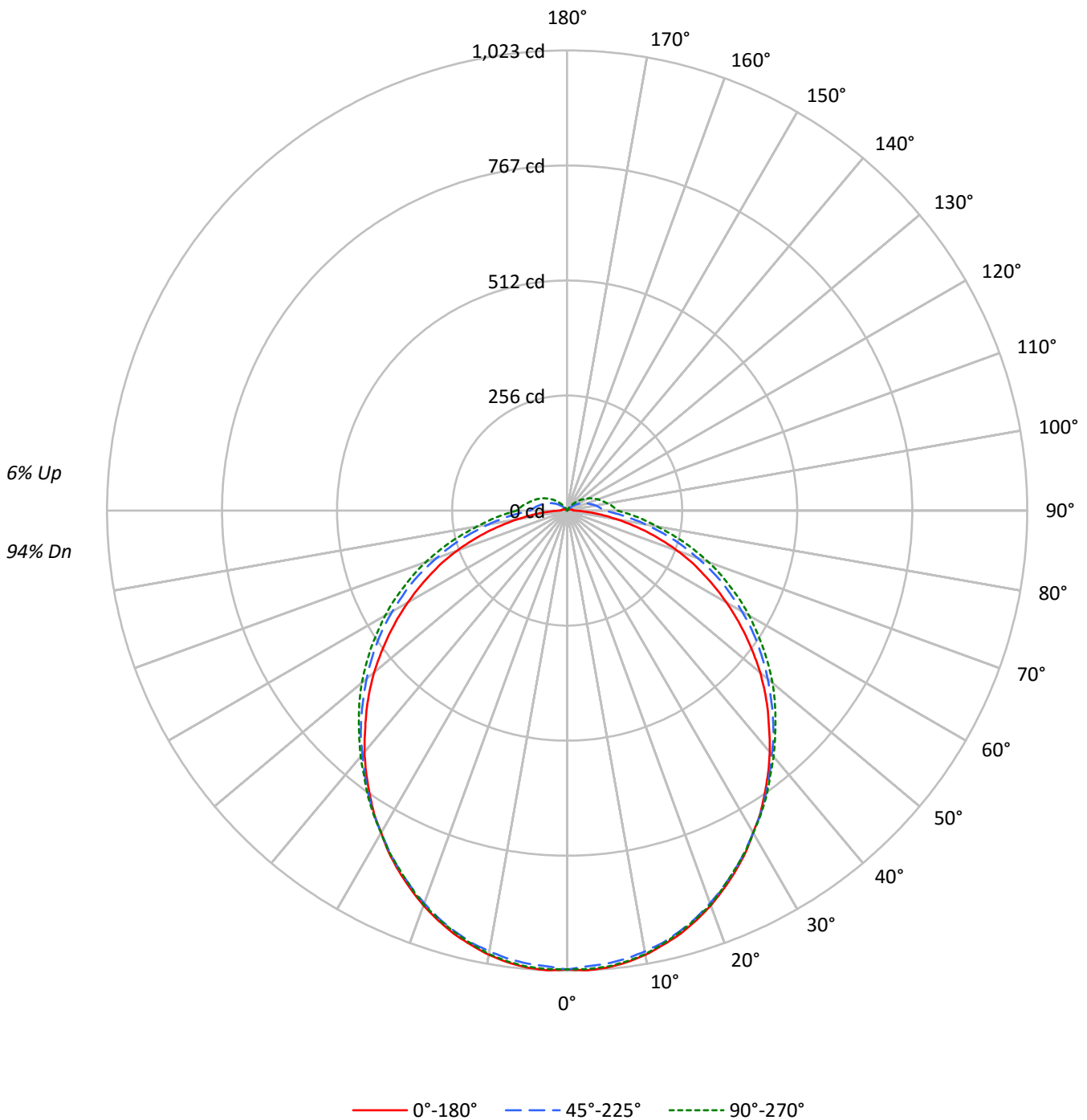
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7249	7249	7249
5°	7264	7110	7130
10°	7211	6977	6962
15°	7126	6819	6752
20°	7009	6626	6542
25°	6871	6420	6284
30°	6704	6194	6050
35°	6548	5985	5836
40°	6389	5766	5619
45°	6209	5577	5427
50°	6037	5373	5255
55°	5831	5179	5053
60°	5605	4957	4848
65°	5369	4726	4616
70°	5102	4410	4377
75°	4677	4104	4083
80°	4122	3732	3761
85°	3600	3462	3630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.5	3.1
10°-20°	274.0	8.7
20°-30°	407.4	12.9
30°-40°	482.5	15.3
40°-50°	498.9	15.8
50°-60°	459.6	14.5
60°-70°	371.5	11.8
70°-80°	248.6	7.9
80°-90°	128.5	4.1
90°-100°	72.4	2.3
100°-110°	53.4	1.7
110°-120°	35.7	1.1
120°-130°	20.2	0.6
130°-140°	8.8	0.3
140°-150°	1.8	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	778.0	24.6
0°-40°	1260.5	39.9
0°-60°	2218.9	70.2
0°-90°	2967.5	93.9
90°-120°	161.4	5.1
90°-150°	192.3	6.1
90°-180°	192.0	6.1
0°-180°	3159.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	1020	1018	1011	1019	1018	97
15°	974	975	968	974	970	274
25°	885	888	882	886	881	407
35°	766	773	770	773	773	479
45°	631	642	647	654	655	487
55°	485	501	517	528	532	433
65°	334	357	381	396	400	331
75°	184	210	242	262	267	195
85°	55	88	123	145	153	57
90°	16	48	82	105	112	11
95°	13	39	73	95	102	10
105°	9	25	55	75	82	10
115°	6	13	39	57	63	6
125°	4	3	23	39	44	3
135°	2	1	8	21	26	2
145°	1	0	0	5	9	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1020	1020	1020	1020	1020
2.5°	1023	1021	1014	1021	1020
5°	1020	1018	1011	1019	1018
7.5°	1013	1012	1005	1012	1011
10°	1003	1003	995	1002	1001
12.5°	989	990	984	989	986
15°	974	975	968	974	970
17.5°	955	957	950	955	952
20°	934	936	929	932	932
22.5°	910	914	906	910	907
25°	885	888	882	886	881
27.5°	858	862	855	858	856
30°	827	833	827	829	828
32.5°	799	804	800	802	801
35°	766	773	770	773	773
37.5°	734	740	739	743	742
40°	701	709	708	712	714
42.5°	665	676	679	684	684
45°	631	642	647	654	655
47.5°	596	606	614	624	626
50°	560	571	582	593	596
52.5°	522	536	550	562	564
55°	485	501	517	528	532
57.5°	447	466	484	496	499
60°	409	429	449	464	467
62.5°	372	392	414	431	435
65°	334	357	381	396	400
67.5°	299	321	345	363	368
70°	260	283	309	328	334
72.5°	222	246	275	296	300
75°	184	210	242	262	267
77.5°	147	177	207	229	233
80°	113	143	177	199	203
82.5°	82	114	149	170	178
85°	55	88	123	145	153
87.5°	35	67	101	124	131
90°	16	48	82	105	112
92.5°	14	43	78	100	107
95°	13	39	73	95	102
97.5°	12	36	69	90	97
100°	11	32	64	85	91
102.5°	10	29	60	80	86
105°	9	25	55	75	82
107.5°	8	22	51	71	77
110°	7	19	47	66	73



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	7	16	43	61	68
115°	6	13	39	57	63
117.5°	5	10	35	52	59
120°	5	8	31	48	54
122.5°	4	5	27	43	49
125°	4	3	23	39	44
127.5°	3	2	19	34	40
130°	3	2	16	30	35
132.5°	2	2	12	26	30
135°	2	1	8	21	26
137.5°	2	1	5	17	21
140°	1	1	2	13	17
142.5°	1	0	0	9	13
145°	1	0	0	5	9
147.5°	0	0	0	2	4
150°	0	0	0	0	1
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)