

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: G3-1802-639-14

Luminaire Tested: **S122DR-S675D835-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-14
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-S675D835-X4F0-XX-UDD-D-W
Description: DEFINE 2 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: 2632.8 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.15' x L: 3.88' x H: 0.08')
CIE Type: Semi-Direct

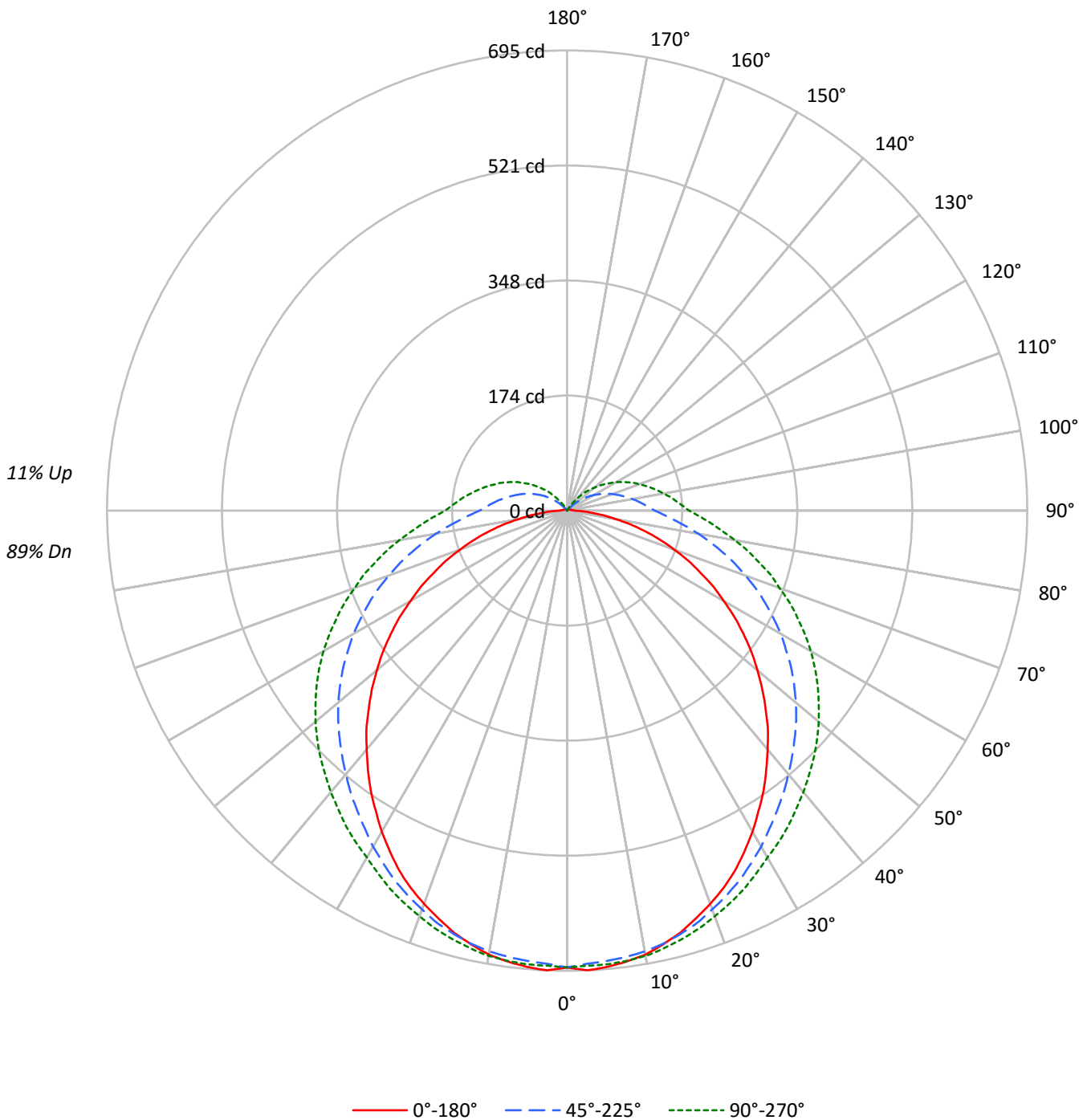
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	104	98	93	88	100	95	90	86	88	85	81	82	79	77	77	75	72	69
2	94	84	77	70	90	81	74	68	76	70	65	71	66	62	66	62	59	56
3	85	73	64	57	81	71	63	56	66	59	54	62	56	51	58	53	49	46
4	77	64	55	48	74	62	54	47	58	51	45	55	48	43	51	46	42	39
5	71	57	48	41	68	56	47	40	52	44	39	49	42	37	46	40	36	33
6	65	51	42	35	63	50	41	35	47	39	34	44	37	32	42	36	31	29
7	60	46	37	31	58	45	37	31	43	35	30	40	34	29	38	32	28	25
8	56	42	34	28	54	41	33	27	39	32	26	37	30	25	35	29	25	23
9	52	39	30	25	50	38	30	24	36	29	24	34	27	23	32	26	22	20
10	49	36	28	22	47	35	27	22	33	26	21	31	25	21	30	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13143	13143	13143
5°	13207	12597	12529
10°	13122	12175	12001
15°	12940	11736	11458
20°	12711	11273	10941
25°	12485	10829	10471
30°	12166	10377	10006
35°	11843	9941	9666
40°	11504	9565	9328
45°	11181	9224	9034
50°	10835	8912	8744
55°	10471	8579	8448
60°	10027	8232	8137
65°	9565	7832	7777
70°	9045	7402	7390
75°	8380	6973	7025
80°	7333	6528	6648
85°	6315	6113	6326



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.4	2.5
10°-20°	187.6	7.1
20°-30°	284.3	10.8
30°-40°	346.1	13.1
40°-50°	372.4	14.1
50°-60°	361.7	13.7
60°-70°	315.9	12.0
70°-80°	243.1	9.2
80°-90°	162.8	6.2
90°-100°	112.3	4.3
100°-110°	82.0	3.1
110°-120°	54.2	2.1
120°-130°	30.2	1.1
130°-140°	12.7	0.5
140°-150°	2.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	537.3	20.4
0°-40°	883.4	33.6
0°-60°	1617.5	61.4
0°-90°	2339.3	88.9
90°-120°	248.5	9.4
90°-150°	293.5	11.1
90°-180°	294.0	11.2
0°-180°	2632.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	690	690	690	690	690	
5°	692	689	683	689	688	66
15°	660	662	662	671	670	186
25°	600	607	616	628	631	276
35°	517	534	553	575	582	323
45°	424	451	486	517	527	327
55°	325	361	413	449	462	291
65°	222	271	330	371	384	221
75°	123	179	243	286	299	130
85°	36	98	162	204	218	38
90°	10	68	132	172	184	7
95°	8	55	115	153	165	6
105°	5	34	86	121	132	6
115°	4	15	60	90	101	4
125°	2	2	34	61	70	2
135°	1	1	11	32	40	1
145°	0	0	0	6	11	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°	690	690	690	690	690
2.5°	695	692	685	690	688
5°	692	689	683	689	688
7.5°	687	685	680	687	686
10°	681	679	676	684	683
12.5°	671	672	670	678	677
15°	660	662	662	671	670
17.5°	646	650	653	662	662
20°	632	637	641	652	652
22.5°	617	623	629	640	642
25°	600	607	616	628	631
27.5°	580	591	601	616	618
30°	560	573	586	602	605
32.5°	538	553	569	588	594
35°	517	534	553	575	582
37.5°	494	513	537	561	568
40°	471	493	520	546	555
42.5°	449	471	503	532	541
45°	424	451	486	517	527
47.5°	400	429	469	501	512
50°	375	406	451	485	496
52.5°	351	384	432	467	479
55°	325	361	413	449	462
57.5°	300	340	392	431	444
60°	273	316	373	411	425
62.5°	249	294	351	392	405
65°	222	271	330	371	384
67.5°	198	249	309	350	364
70°	172	224	286	329	341
72.5°	148	202	265	307	322
75°	123	179	243	286	299
77.5°	99	157	222	265	279
80°	75	136	201	243	257
82.5°	55	115	181	223	236
85°	36	98	162	204	218
87.5°	22	82	146	187	200
90°	10	68	132	172	184
92.5°	9	62	123	162	174
95°	8	55	115	153	165
97.5°	7	50	108	145	157
100°	7	44	100	137	148
102.5°	6	39	93	129	140
105°	5	34	86	121	132
107.5°	5	29	79	113	124
110°	4	24	73	105	116



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4	20	66	98	109
115°	4	15	60	90	101
117.5°	3	11	53	83	93
120°	3	7	47	75	86
122.5°	3	4	41	68	77
125°	2	2	34	61	70
127.5°	2	1	28	53	62
130°	2	1	22	46	54
132.5°	2	1	16	39	47
135°	1	1	11	32	40
137.5°	1	1	6	25	32
140°	1	0	2	18	24
142.5°	1	0	0	12	17
145°	0	0	0	6	11
147.5°	0	0	0	1	4
150°	0	0	0	0	0
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)