

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: G3-1802-639-63

Luminaire Tested: **S122RDR-H675D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-63
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D835-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2376.9 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

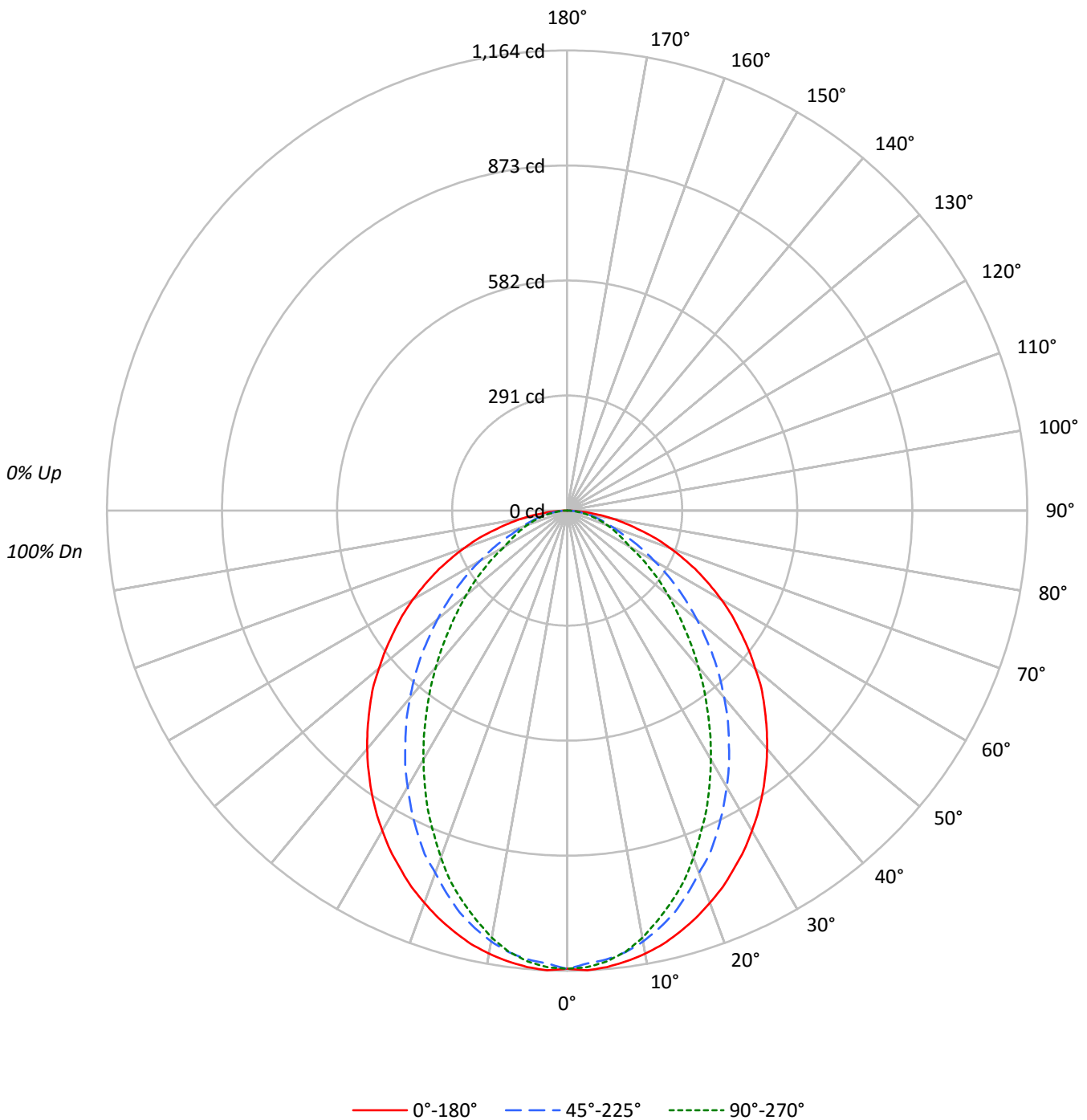
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: G3-1802-639-63

CATALOG NUMBER: S122RDR-H675D835-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: G3-1802-639-63

CATALOG NUMBER: S122RDR-H675D835-X4F0-XX-UDD-F-W

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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88					86				
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76					74				
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66					64				
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57					55				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51					49				
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45					43				
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41					39				
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37					35				
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34					32				
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31					29				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22076	22076	22076
5°	22161	21797	21893
10°	22011	21411	21218
15°	21751	20745	20173
20°	21405	19763	18932
25°	20996	18873	17528
30°	20565	17749	15990
35°	20091	16579	14394
40°	19569	15367	12830
45°	19018	14088	11287
50°	18402	12683	9897
55°	17767	11291	8535
60°	17181	9714	6971
65°	16406	8203	6445
70°	15427	6794	6015
75°	14057	6182	5520
80°	12615	5485	4936
85°	10490	4590	4371



TEST NUMBER: G3-1802-639-63

CATALOG NUMBER: S122RDR-H675D835-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.6	4.6
10°-20°	297.5	12.5
20°-30°	417.4	17.6
30°-40°	454.6	19.1
40°-50°	417.8	17.6
50°-60°	327.9	13.8
60°-70°	213.9	9.0
70°-80°	110.6	4.7
80°-90°	28.6	1.2
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°	823.4	34.6
0°-40°	1278.0	53.8
0°-60°	2023.8	85.1
0°-90°	2376.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2376.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1159	1159	1159	1159	1159	
5°	1159	1153	1140	1148	1145	110
15°	1103	1090	1052	1031	1023	311
25°	999	964	898	854	834	460
35°	864	807	713	647	619	540
45°	706	634	523	447	419	545
55°	535	455	340	276	257	479
65°	364	276	182	148	143	359
75°	191	119	84	77	75	204
85°	48	23	21	20	20	55
90°	0	0	0	0	0	



TEST NUMBER: G3-1802-639-63

CATALOG NUMBER: S122RDR-H675D835-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1159	1159	1159	1159	1159
2.5°	1164	1159	1147	1158	1156
5°	1159	1153	1140	1148	1145
7.5°	1150	1144	1127	1131	1126
10°	1138	1130	1107	1103	1097
12.5°	1123	1112	1081	1069	1061
15°	1103	1090	1052	1031	1023
17.5°	1081	1062	1015	991	983
20°	1056	1034	975	950	934
22.5°	1030	1002	941	902	883
25°	999	964	898	854	834
27.5°	969	928	853	802	780
30°	935	890	807	748	727
32.5°	901	849	762	698	674
35°	864	807	713	647	619
37.5°	826	767	668	595	568
40°	787	721	618	542	516
42.5°	747	680	571	493	468
45°	706	634	523	447	419
47.5°	667	589	474	402	375
50°	621	544	428	355	334
52.5°	579	499	383	313	295
55°	535	455	340	276	257
57.5°	494	409	297	239	221
60°	451	365	255	202	183
62.5°	406	320	218	168	162
65°	364	276	182	148	143
67.5°	319	235	145	130	125
70°	277	195	122	111	108
72.5°	236	157	103	94	91
75°	191	119	84	77	75
77.5°	152	84	67	62	60
80°	115	61	50	47	45
82.5°	79	41	35	33	32
85°	48	23	21	20	20
87.5°	19	9	9	8	8
90°	0	0	0	0	0

(END OF REPORT)