

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: G3-1802-639-25

Luminaire Tested: **S123RDR-S775D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-25
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D835-X4F0-XX-UDD-F-W
Description: DEFINE 3 REGRESSED 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: 2785.6 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 3.92' x H: 0')
CIE Type: Direct

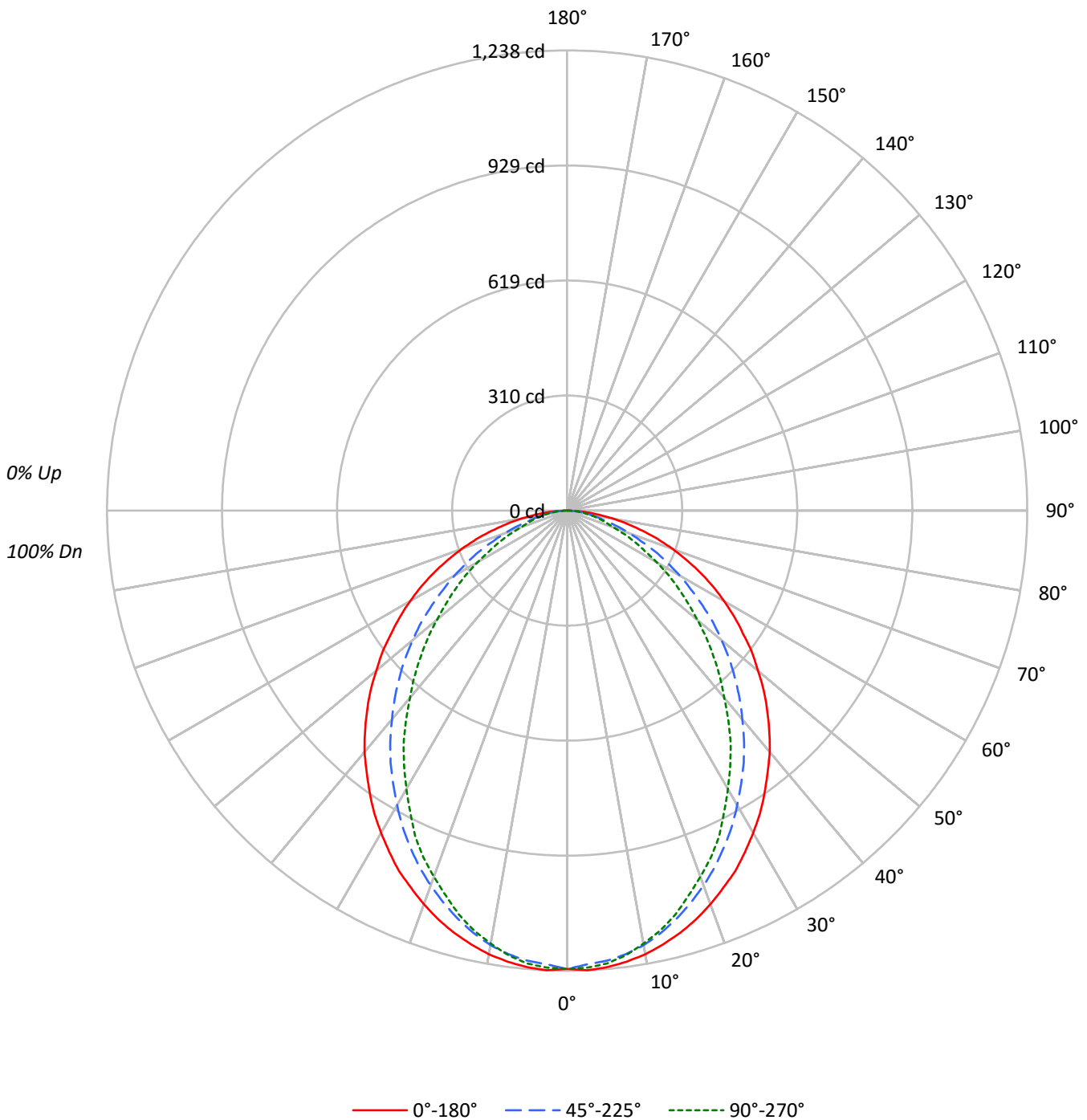
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: G3-1802-639-25

CATALOG NUMBER: S123RDR-S775D835-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: G3-1802-639-25

CATALOG NUMBER: S123RDR-S775D835-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	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42					42			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13554	13554	13554
5°	13606	13418	13496
10°	13529	13250	13205
15°	13384	12940	12803
20°	13184	12552	12260
25°	12978	12117	11729
30°	12706	11615	10980
35°	12427	11112	10293
40°	12169	10519	9442
45°	11831	9934	8675
50°	11458	9269	7816
55°	11078	8510	7015
60°	10729	7695	6134
65°	10275	6815	5254
70°	9707	5721	4243
75°	8877	4502	3993
80°	7913	3988	3672
85°	6685	3532	3279



TEST NUMBER: G3-1802-639-25

CATALOG NUMBER: S123RDR-S775D835-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	4.2
10°-20°	322.4	11.6
20°-30°	464.3	16.7
30°-40°	522.8	18.8
40°-50°	500.1	18.0
50°-60°	409.4	14.7
60°-70°	276.0	9.9
70°-80°	138.4	5.0
80°-90°	36.2	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°	902.6	32.4
0°-40°	1425.4	51.2
0°-60°	2334.9	83.8
0°-90°	2785.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2785.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1233	1233	1233	1233	1233	
5°	1233	1228	1216	1225	1223	117
15°	1176	1165	1137	1132	1125	331
25°	1070	1045	999	978	967	492
35°	926	890	828	785	767	580
45°	761	716	639	582	558	587
55°	578	529	444	386	366	518
65°	395	340	262	213	202	391
75°	209	161	106	96	94	223
85°	53	31	28	26	26	61
90°	0	0	0	0	0	



TEST NUMBER: G3-1802-639-25

CATALOG NUMBER: S123RDR-S775D835-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1233	1233	1233	1233	1233
2.5°	1238	1234	1222	1233	1231
5°	1233	1228	1216	1225	1223
7.5°	1224	1219	1204	1210	1207
10°	1212	1205	1187	1188	1183
12.5°	1195	1187	1164	1163	1157
15°	1176	1165	1137	1132	1125
17.5°	1153	1141	1106	1096	1086
20°	1127	1111	1073	1060	1048
22.5°	1098	1079	1038	1021	1010
25°	1070	1045	999	978	967
27.5°	1036	1009	959	931	914
30°	1001	971	915	881	865
32.5°	966	931	871	833	816
35°	926	890	828	785	767
37.5°	886	847	782	734	712
40°	848	804	733	681	658
42.5°	805	761	687	629	609
45°	761	716	639	582	558
47.5°	718	668	592	530	509
50°	670	623	542	480	457
52.5°	627	575	495	430	410
55°	578	529	444	386	366
57.5°	534	481	395	340	323
60°	488	433	350	296	279
62.5°	442	387	304	254	236
65°	395	340	262	213	202
67.5°	348	292	216	179	167
70°	302	248	178	143	132
72.5°	256	203	141	114	111
75°	209	161	106	96	94
77.5°	166	122	83	77	75
80°	125	84	63	60	58
82.5°	86	52	45	42	42
85°	53	31	28	26	26
87.5°	24	13	13	12	11
90°	0	0	0	0	0

(END OF REPORT)