

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: P334062

Luminaire Tested: **S123RDW-S775D835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334062  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDW-S775D835-4F0-1E-UDD-F  
Description: DEFINE 3 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 775 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2785.6 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

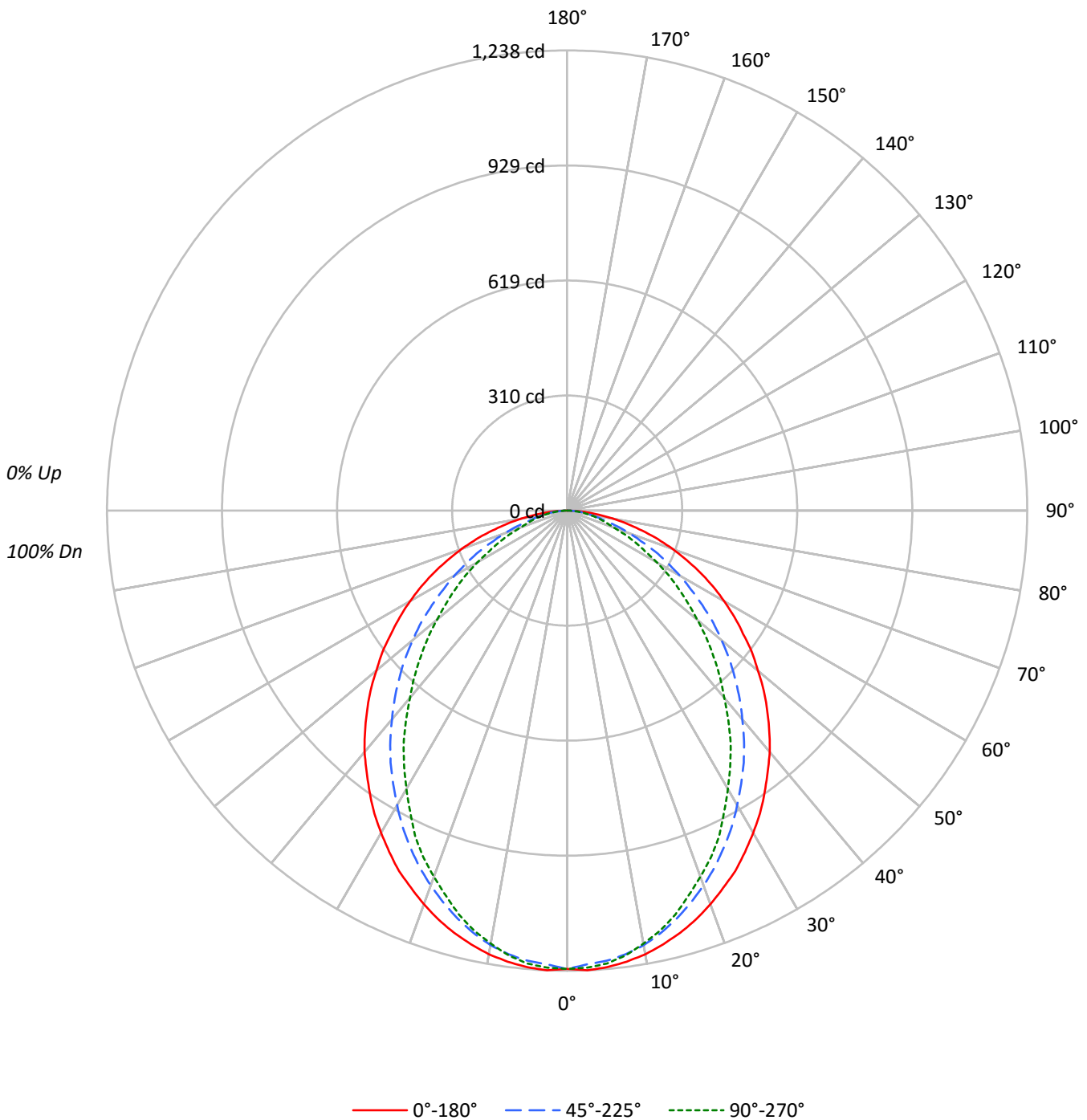
Input Watts (W): 26.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13272	13272	13272
5°	13323	13139	13215
10°	13247	12974	12930
15°	13105	12670	12537
20°	12909	12291	12005
25°	12708	11865	11485
30°	12442	11373	10751
35°	12168	10880	10079
40°	11915	10300	9246
45°	11584	9727	8494
50°	11220	9076	7653
55°	10847	8332	6868
60°	10506	7535	6006
65°	10060	6673	5145
70°	9504	5602	4154
75°	8692	4408	3909
80°	7748	3905	3595
85°	6546	3458	3211



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**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	



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**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)