

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: G3-1802-639-11

Luminaire Tested: **S123DR-S775D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-11
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-S775D835-X4F0-XX-UDD-F-W
Description: DEFINE 3 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: 3026.8 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

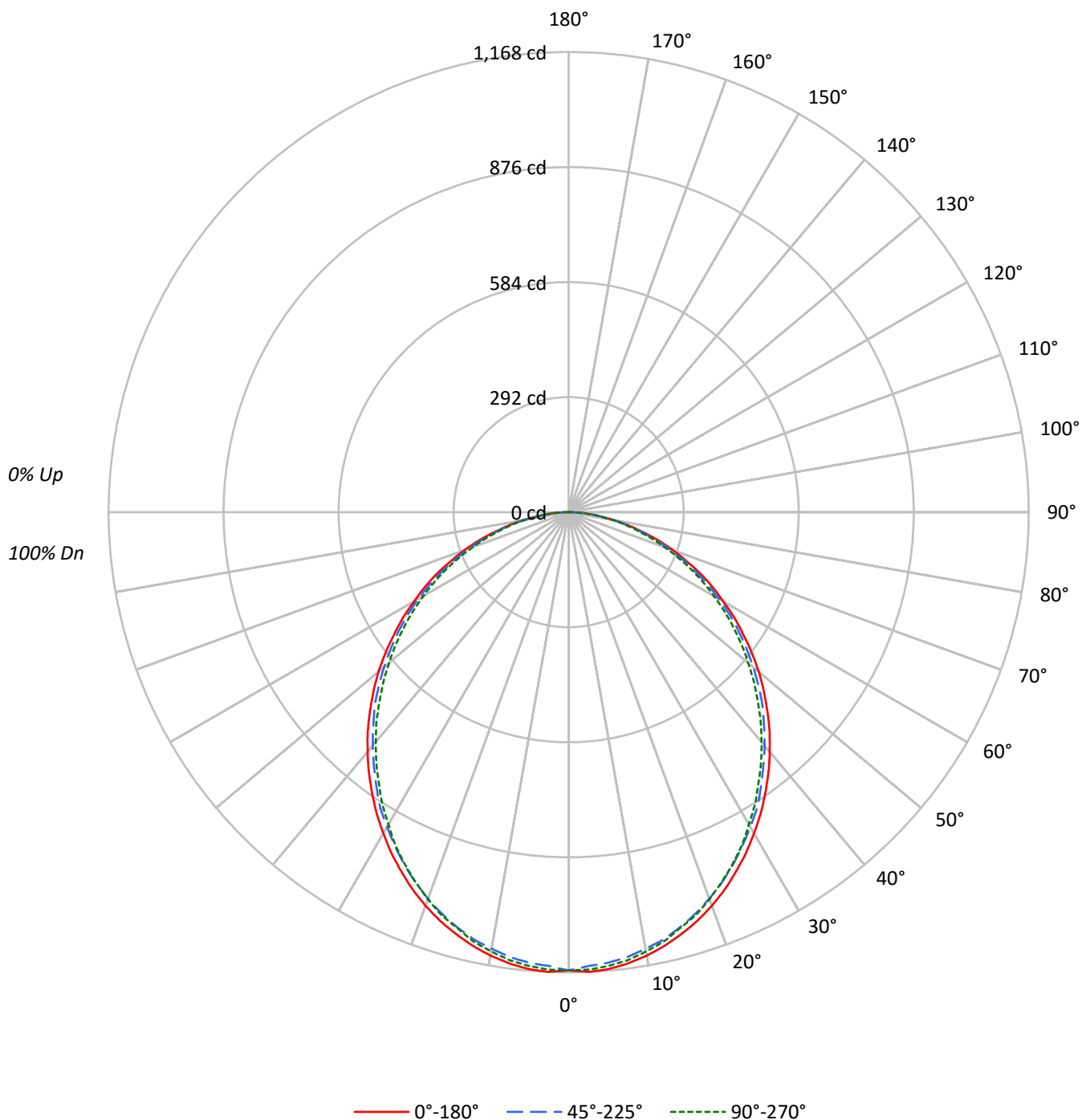
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84		
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70		
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44		
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39		
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34		
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31		
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28		
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14097	14097	14097
5°	14163	13968	14066
10°	14068	13847	13933
15°	13904	13691	13716
20°	13712	13467	13480
25°	13455	13200	13174
30°	13171	12905	12807
35°	12874	12592	12430
40°	12564	12247	12057
45°	12222	11931	11639
50°	11880	11541	11220
55°	11433	11137	10799
60°	10982	10667	10327
65°	10583	10153	9838
70°	9994	9569	9144
75°	9132	8805	8430
80°	8237	7888	7818
85°	7232	6954	6676

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.6	3.6
10°-20°	309.6	10.2
20°-30°	457.2	15.1
30°-40°	534.0	17.6
40°-50°	536.8	17.7
50°-60°	471.6	15.6
60°-70°	351.2	11.6
70°-80°	199.9	6.6
80°-90°	56.8	1.9
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°	876.5	29.0
0°-40°	1410.5	46.6
0°-60°	2418.9	79.9
0°-90°	3026.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3026.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1163	1163	1163	1163	1163	
5°	1164	1159	1148	1158	1156	110
15°	1108	1104	1091	1099	1093	312
25°	1006	1000	987	988	985	463
35°	870	864	851	845	840	544
45°	713	709	696	684	679	550
55°	541	540	527	516	511	485
65°	369	364	354	346	343	364
75°	195	191	188	183	180	208
85°	52	50	50	48	48	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1163	1163	1163	1163	1163
2.5°	1168	1164	1153	1163	1162
5°	1164	1159	1148	1158	1156
7.5°	1155	1150	1139	1148	1147
10°	1143	1138	1125	1134	1132
12.5°	1127	1123	1111	1117	1116
15°	1108	1104	1091	1099	1093
17.5°	1087	1082	1069	1075	1073
20°	1063	1057	1044	1048	1045
22.5°	1036	1030	1017	1020	1016
25°	1006	1000	987	988	985
27.5°	975	969	955	956	953
30°	941	936	922	922	915
32.5°	907	900	890	883	880
35°	870	864	851	845	840
37.5°	833	825	812	805	802
40°	794	788	774	766	762
42.5°	755	748	734	726	722
45°	713	709	696	684	679
47.5°	672	666	654	642	638
50°	630	625	612	601	595
52.5°	586	583	569	560	554
55°	541	540	527	516	511
57.5°	499	495	485	475	469
60°	453	452	440	431	426
62.5°	412	409	397	388	385
65°	369	364	354	346	343
67.5°	323	319	311	304	300
70°	282	276	270	263	258
72.5°	239	235	228	222	220
75°	195	191	188	183	180
77.5°	156	154	150	146	146
80°	118	115	113	112	112
82.5°	81	81	81	79	78
85°	52	50	50	48	48
87.5°	26	23	22	21	21
90°	0	0	0	0	0

(END OF REPORT)