

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: P242429

Luminaire Tested: **S123DR-S775D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-S775D830-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2852.8 lumens
Efficiency: N/A
Efficacy: 108.1 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

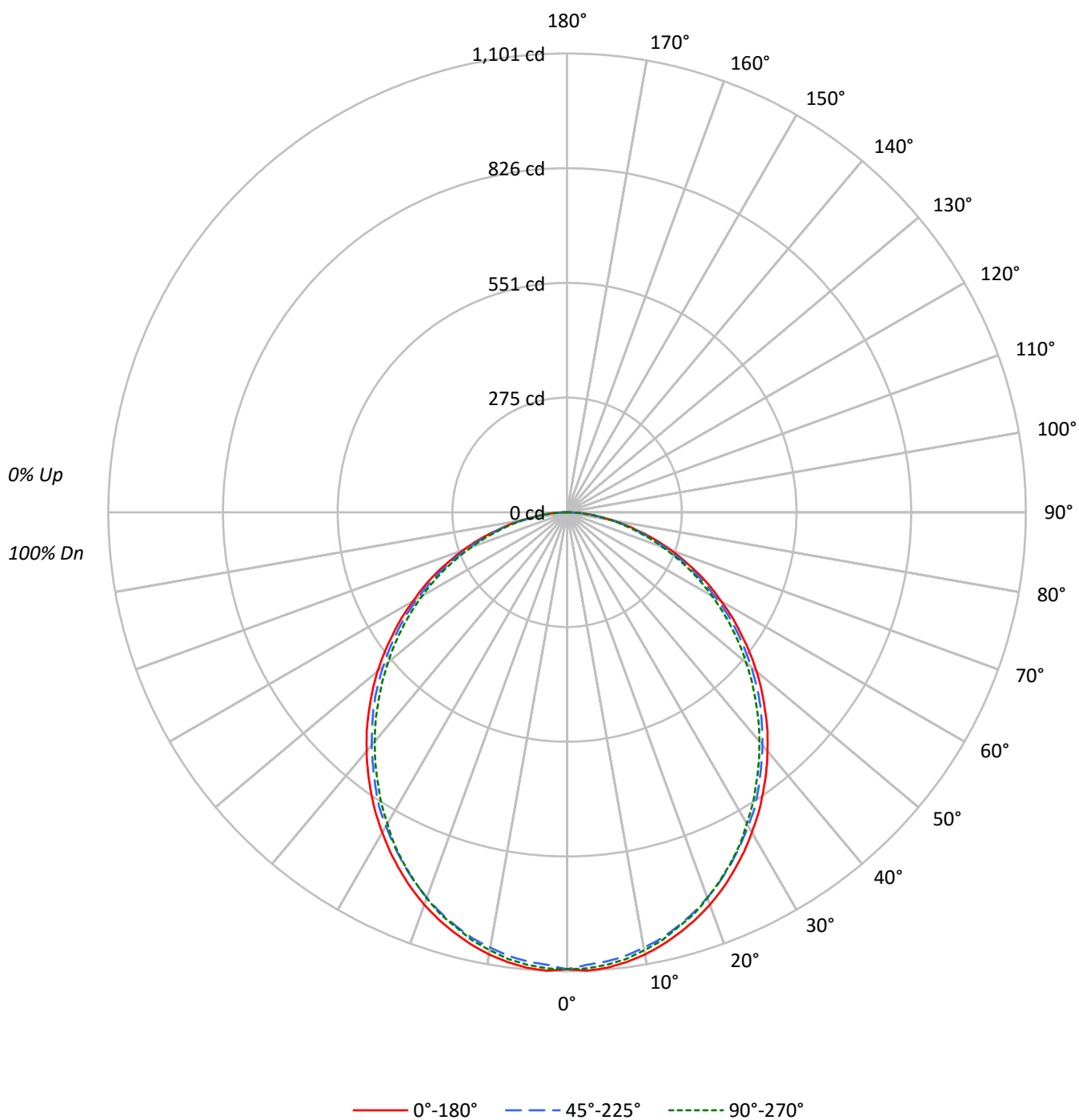
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	13287	13287	13287
5°	13349	13165	13258
10°	13260	13052	13133
15°	13105	12904	12928
20°	12924	12693	12706
25°	12682	12442	12417
30°	12413	12163	12070
35°	12134	11869	11715
40°	11842	11543	11364
45°	11519	11245	10971
50°	11197	10877	10575
55°	10776	10497	10178
60°	10352	10053	9733
65°	9975	9571	9273
70°	9420	9020	8619
75°	8608	8299	7948
80°	7762	7434	7371
85°	6815	6550	6286

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	3.6
10°-20°	291.8	10.2
20°-30°	430.9	15.1
30°-40°	503.3	17.6
40°-50°	506.0	17.7
50°-60°	444.5	15.6
60°-70°	331.0	11.6
70°-80°	188.4	6.6
80°-90°	53.5	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°	826.1	29.0
0°-40°	1329.4	46.6
0°-60°	2279.9	79.9
0°-90°	2852.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2852.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1097	1092	1082	1092	1090	104
15°	1044	1041	1028	1036	1030	294
25°	948	942	930	931	928	437
35°	820	814	802	796	792	513
45°	672	668	656	645	640	519
55°	510	509	497	486	482	457
65°	348	343	334	326	323	343
75°	184	180	177	172	170	196
85°	49	47	47	45	45	56
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1096.2	1096.2	1096.2	1096.2	1096.2
2.5°	1100.9	1097.1	1086.8	1096.2	1095.2
5°	1097.1	1092.4	1082.0	1091.5	1089.6
7.5°	1088.6	1083.9	1073.6	1082.0	1081.1
10°	1077.3	1072.6	1060.4	1068.8	1067.0
12.5°	1062.2	1058.5	1047.2	1052.8	1051.9
15°	1044.3	1040.6	1028.3	1035.9	1030.2
17.5°	1024.5	1019.8	1007.6	1013.2	1011.3
20°	1001.9	996.3	984.0	987.8	985.0
22.5°	976.5	970.8	958.6	961.4	957.6
25°	948.2	942.5	930.3	931.2	928.4
27.5°	919.0	913.3	900.1	901.1	898.2
30°	886.9	882.2	869.0	869.0	862.4
32.5°	854.9	848.3	838.9	832.3	829.4
35°	820.0	814.4	802.1	796.4	791.7
37.5°	785.1	777.6	765.3	758.7	755.9
40°	748.4	742.7	729.5	722.0	718.2
42.5°	711.6	705.0	691.8	684.3	680.5
45°	672.0	668.3	656.0	644.7	640.0
47.5°	633.4	627.7	616.4	605.1	601.3
50°	593.8	589.1	576.8	566.5	560.8
52.5°	552.3	549.5	536.3	527.8	522.2
55°	509.9	509.0	496.7	486.4	481.6
57.5°	470.3	466.6	457.1	447.7	442.1
60°	427.0	426.0	414.7	406.2	401.5
62.5°	388.3	385.5	374.2	365.7	362.9
65°	347.8	343.1	333.7	326.1	323.3
67.5°	304.4	300.7	293.1	286.5	282.8
70°	265.8	260.1	254.5	247.9	243.2
72.5°	225.3	221.5	214.9	209.2	207.4
75°	183.8	180.0	177.2	172.5	169.7
77.5°	147.0	145.2	141.4	137.6	137.6
80°	111.2	108.4	106.5	105.6	105.6
82.5°	76.3	76.3	76.3	74.5	73.5
85°	49.0	47.1	47.1	45.2	45.2
87.5°	24.5	21.7	20.7	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)