

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: P243288

Luminaire Tested: **S123DR-H560D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243288
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-49)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-H560D830-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2016.4 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

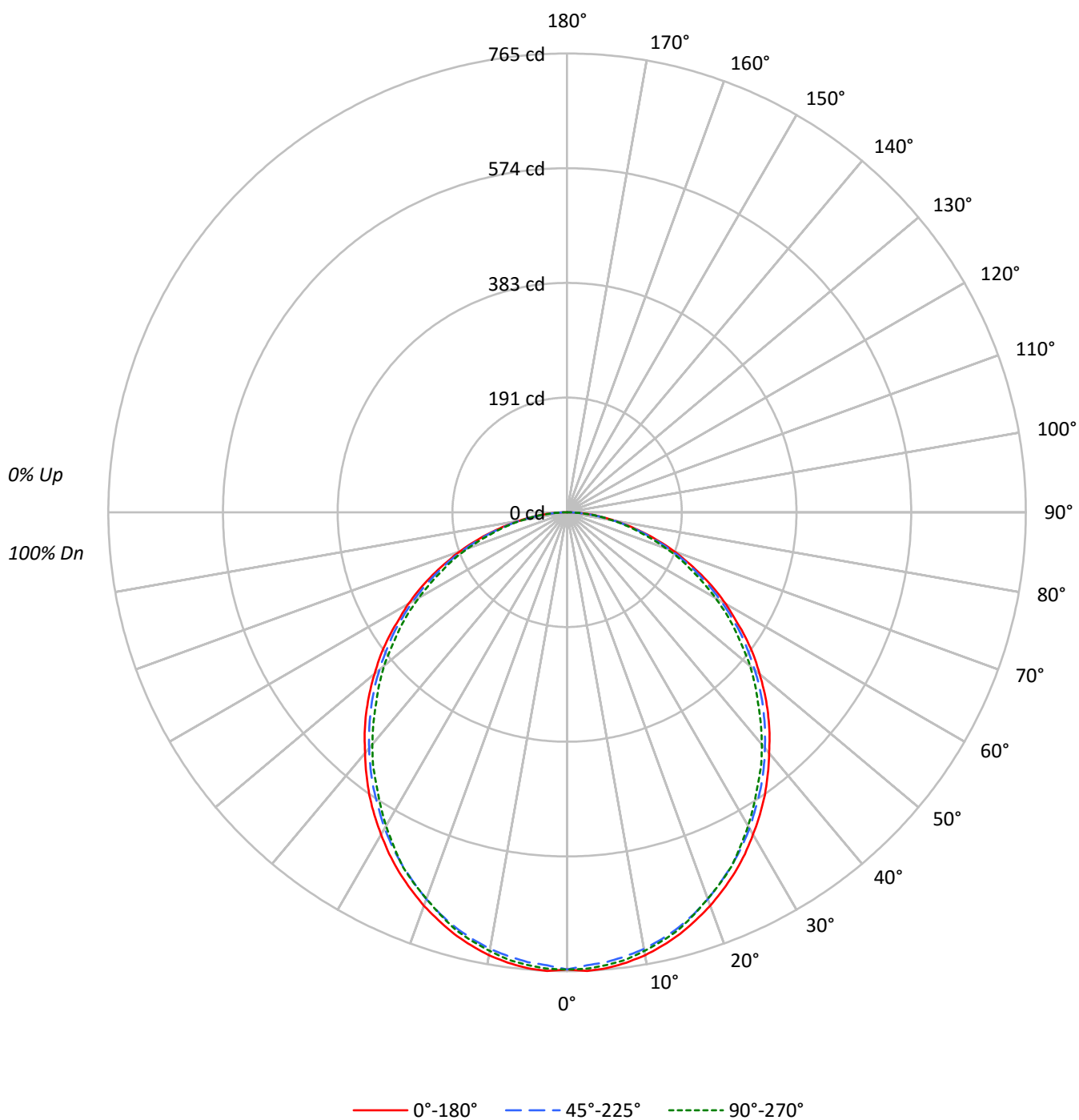
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	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
1	109	104	100	96	106	102	98	94		97	94	91		94	91	89		90	88	86
2	99	91	84	78	96	89	83	77		85	80	76		82	78	74		79	75	72
3	90	80	72	65	88	78	71	65		75	69	64		73	67	62		70	65	61
4	83	71	62	55	80	70	61	55		67	60	54		65	59	54		63	57	53
5	76	63	54	48	74	62	54	48		60	53	47		58	52	47		56	51	46
6	70	57	48	42	69	56	48	42		54	47	41		53	46	41		51	45	41
7	65	52	43	37	64	51	43	37		50	42	37		48	41	36		47	41	36
8	61	47	39	33	59	47	39	33		45	38	33		44	37	33		43	37	32
9	57	44	35	30	56	43	35	30		42	35	30		41	34	29		40	34	29
10	53	40	32	27	52	40	32	27		39	32	27		38	31	27		37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9239	9239	9239
5°	9281	9160	9221
10°	9227	9096	9141
15°	9132	8997	9036
20°	9005	8851	8844
25°	8858	8689	8699
30°	8681	8514	8452
35°	8508	8322	8201
40°	8293	8124	7994
45°	8122	7928	7722
50°	7903	7701	7513
55°	7675	7477	7223
60°	7404	7205	6916
65°	7084	6866	6579
70°	6727	6503	6234
75°	6238	6060	5737
80°	5612	5480	5305
85°	5243	4979	4812

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	3.6
10°-20°	203.4	10.1
20°-30°	301.1	14.9
30°-40°	353.1	17.5
40°-50°	357.0	17.7
50°-60°	315.7	15.7
60°-70°	237.1	11.8
70°-80°	136.6	6.8
80°-90°	40.5	2.0
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°	576.3	28.6
0°-40°	929.4	46.1
0°-60°	1602.1	79.5
0°-90°	2016.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2016.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	762	762	762	762	762	
5°	763	760	753	759	758	72
15°	728	724	717	722	720	205
25°	662	657	650	653	650	305
35°	575	570	562	560	554	359
45°	474	470	462	456	450	365
55°	363	361	354	347	342	324
65°	247	245	239	233	229	245
75°	133	132	129	126	122	141
85°	38	37	36	35	35	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	762.2	762.2	762.2	762.2	762.2
2.5°	765.4	762.8	755.9	762.8	761.6
5°	762.8	759.7	752.8	759.1	757.8
7.5°	757.2	754.1	746.5	753.4	752.2
10°	749.7	746.5	739.0	744.6	742.7
12.5°	739.6	736.5	728.9	733.3	732.1
15°	727.7	723.9	717.0	722.0	720.1
17.5°	713.2	710.1	702.5	708.8	703.2
20°	698.1	695.0	686.2	691.8	685.6
22.5°	680.5	676.8	668.0	671.7	668.6
25°	662.3	657.3	649.7	652.9	650.4
27.5°	642.2	637.2	629.6	630.9	626.5
30°	620.2	615.8	608.3	609.5	603.9
32.5°	598.2	594.4	585.0	585.0	579.4
35°	575.0	569.9	562.4	560.5	554.2
37.5°	549.8	545.4	538.5	535.4	531.6
40°	524.1	521.6	513.4	509.6	505.2
42.5°	499.6	495.2	488.2	483.2	478.2
45°	473.8	470.0	462.5	456.2	450.5
47.5°	446.8	443.6	436.1	429.2	424.8
50°	419.1	416.6	408.4	400.9	398.4
52.5°	392.1	389.0	380.8	373.9	368.9
55°	363.2	360.7	353.8	346.9	341.8
57.5°	332.4	332.4	324.9	318.6	314.8
60°	305.4	302.2	297.2	290.3	285.3
62.5°	277.1	275.2	268.3	261.4	257.6
65°	247.0	245.1	239.4	233.1	229.4
67.5°	217.4	216.8	211.8	206.7	204.2
70°	189.8	188.5	183.5	178.5	175.9
72.5°	161.5	160.2	155.8	151.4	148.3
75°	133.2	132.0	129.4	125.7	122.5
77.5°	105.6	105.6	102.4	101.2	99.9
80°	80.4	79.8	78.5	77.3	76.0
82.5°	57.8	57.2	55.9	55.3	55.3
85°	37.7	37.1	35.8	35.2	34.6
87.5°	19.5	18.2	17.6	16.3	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)