

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: P243292

Luminaire Tested: **S123DR-H340D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243292
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-H340D835-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1343.3 lumens
Efficiency: N/A
Efficacy: 119.9 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

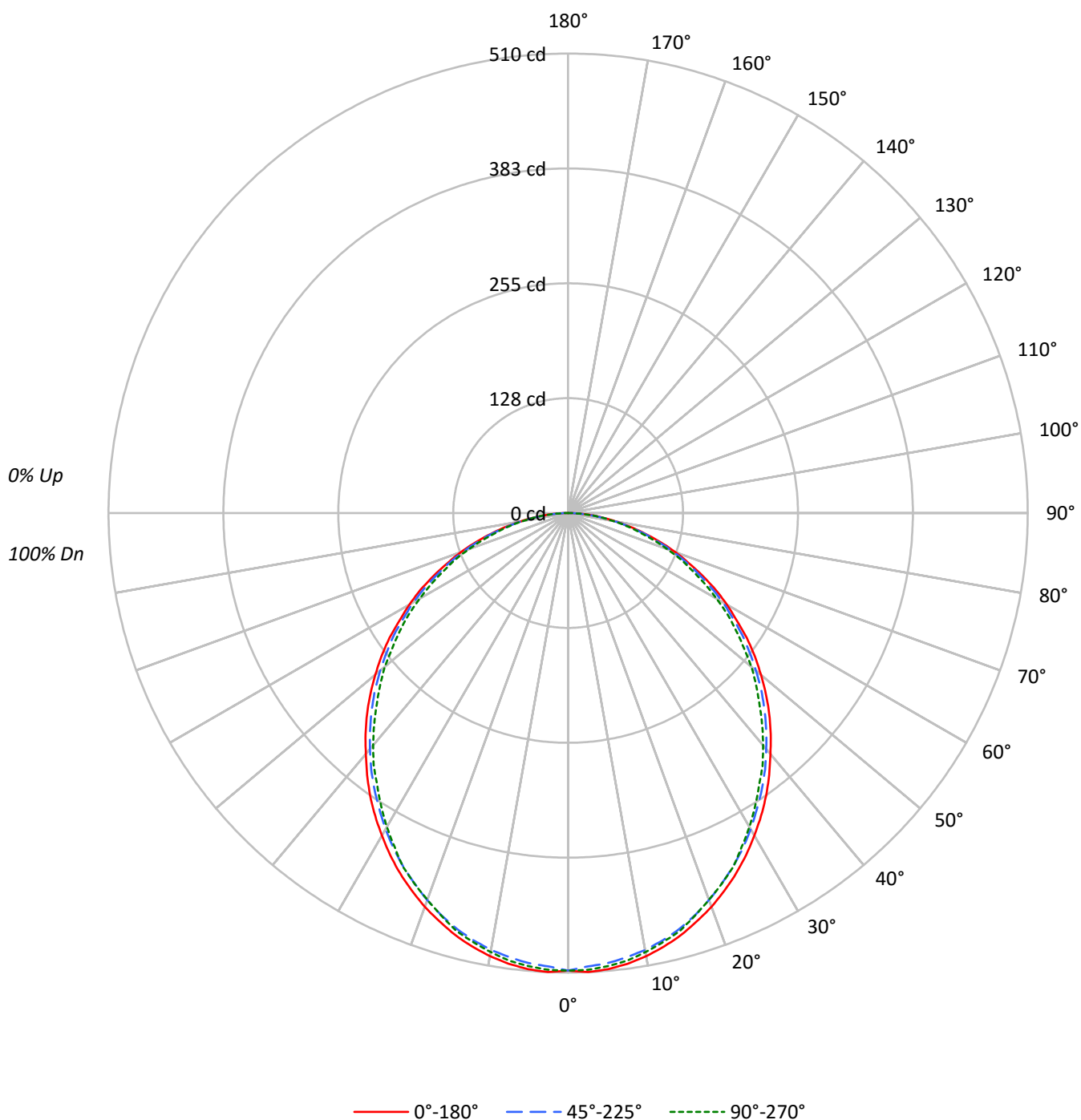
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84		84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70		70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59		59
4	83	71	62	55	80	70	61	55	67	60	54	65	59	54	63	57	53	51		51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39		39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30		30
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	27		27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6155	6155	6155
5°	6184	6102	6143
10°	6147	6059	6090
15°	6084	5995	6021
20°	5999	5896	5891
25°	5901	5790	5795
30°	5783	5671	5631
35°	5667	5545	5463
40°	5524	5412	5326
45°	5410	5281	5146
50°	5265	5131	5005
55°	5114	4981	4812
60°	4933	4800	4608
65°	4718	4575	4382
70°	4480	4331	4154
75°	4154	4037	3822
80°	3741	3651	3539
85°	3491	3324	3199

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.9	3.6
10°-20°	135.5	10.1
20°-30°	200.6	14.9
30°-40°	235.2	17.5
40°-50°	237.8	17.7
50°-60°	210.3	15.7
60°-70°	158.0	11.8
70°-80°	91.0	6.8
80°-90°	27.0	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°	384.0	28.6
0°-40°	619.2	46.1
0°-60°	1067.3	79.5
0°-90°	1343.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1343.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	508	508	508	508	508	
5°	508	506	502	506	505	48
15°	485	482	478	481	480	137
25°	441	438	433	435	433	203
35°	383	380	375	373	369	239
45°	316	313	308	304	300	243
55°	242	240	236	231	228	216
65°	164	163	160	155	153	163
75°	89	88	86	84	82	94
85°	25	25	24	23	23	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	507.8	507.8	507.8	507.8	507.8
2.5°	509.9	508.2	503.6	508.2	507.4
5°	508.2	506.1	501.5	505.7	504.9
7.5°	504.5	502.4	497.3	501.9	501.1
10°	499.4	497.3	492.3	496.1	494.8
12.5°	492.7	490.6	485.6	488.5	487.7
15°	484.8	482.3	477.7	481.0	479.8
17.5°	475.1	473.1	468.0	472.2	468.4
20°	465.1	463.0	457.1	460.9	456.7
22.5°	453.4	450.9	445.0	447.5	445.4
25°	441.2	437.9	432.9	435.0	433.3
27.5°	427.8	424.5	419.5	420.3	417.4
30°	413.2	410.3	405.2	406.1	402.3
32.5°	398.5	396.0	389.7	389.7	386.0
35°	383.0	379.7	374.7	373.4	369.2
37.5°	366.3	363.4	358.8	356.7	354.2
40°	349.1	347.5	342.0	339.5	336.6
42.5°	332.8	329.9	325.3	321.9	318.6
45°	315.6	313.1	308.1	303.9	300.2
47.5°	297.6	295.6	290.5	285.9	283.0
50°	279.2	277.6	272.1	267.1	265.4
52.5°	261.2	259.1	253.7	249.1	245.7
55°	242.0	240.3	235.7	231.1	227.7
57.5°	221.5	221.5	216.4	212.2	209.7
60°	203.5	201.4	198.0	193.4	190.1
62.5°	184.6	183.4	178.8	174.2	171.6
65°	164.5	163.3	159.5	155.3	152.8
67.5°	144.8	144.4	141.1	137.7	136.1
70°	126.4	125.6	122.2	118.9	117.2
72.5°	107.6	106.8	103.8	100.9	98.8
75°	88.7	87.9	86.2	83.7	81.6
77.5°	70.3	70.3	68.2	67.4	66.6
80°	53.6	53.2	52.3	51.5	50.7
82.5°	38.5	38.1	37.3	36.8	36.8
85°	25.1	24.7	23.9	23.4	23.0
87.5°	13.0	12.1	11.7	10.9	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)