

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: P333990

Luminaire Tested: **S123DS-S340D835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333990
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: S123DS-S340D835-4F0-1E-UDD-F
Description: DEFINE 3 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 340 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1321.6 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

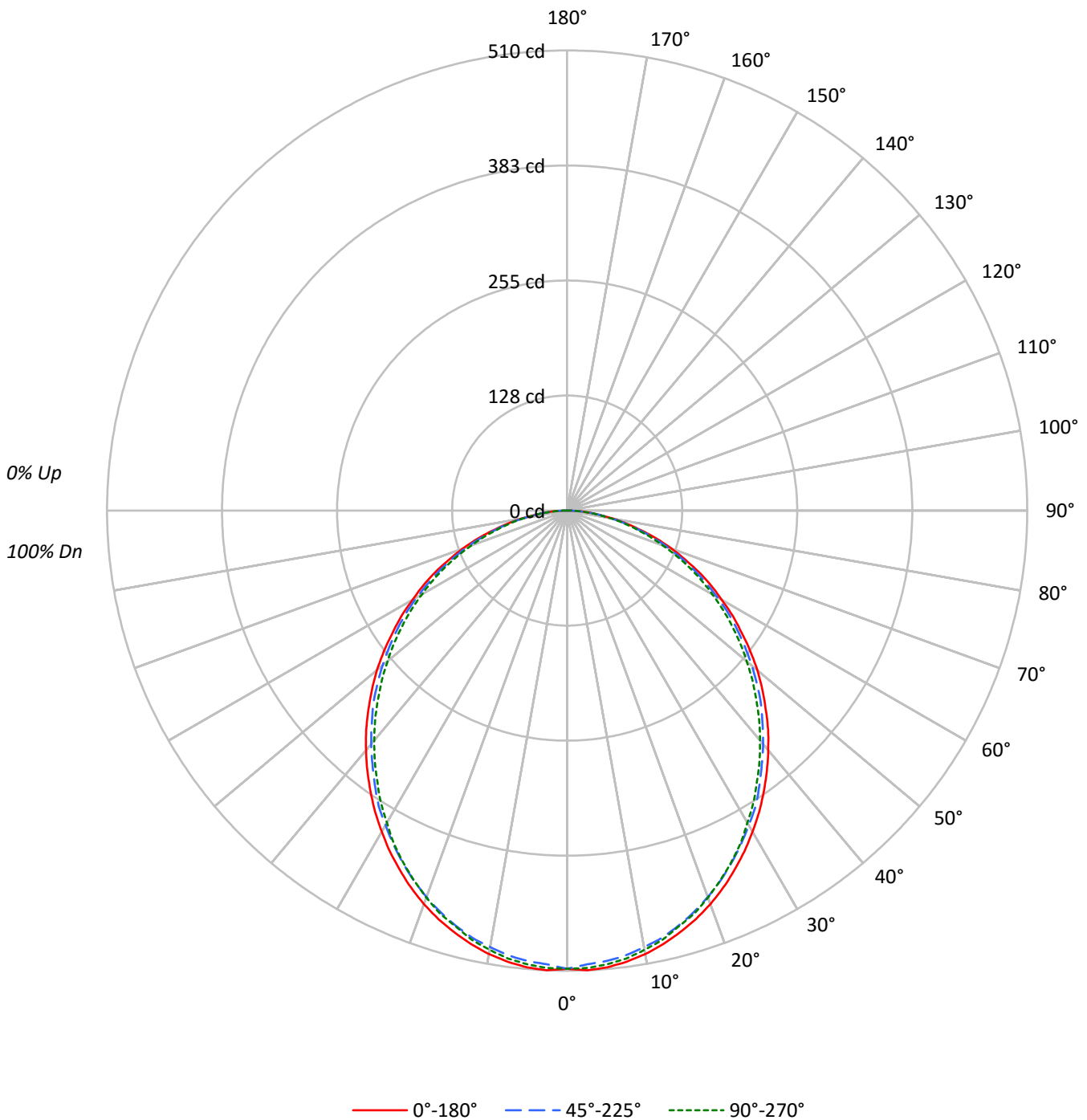
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
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°	5466	5466	5466
5°	5491	5415	5453
10°	5455	5369	5403
15°	5391	5309	5318
20°	5316	5221	5227
25°	5216	5118	5108
30°	5107	5004	4965
35°	4992	4883	4820
40°	4872	4748	4675
45°	4739	4626	4513
50°	4607	4474	4351
55°	4433	4318	4187
60°	4258	4135	4004
65°	4103	3938	3815
70°	3874	3710	3544
75°	3539	3414	3269
80°	3192	3056	3031
85°	2803	2692	2594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.9	3.6
10°-20°	135.2	10.2
20°-30°	199.6	15.1
30°-40°	233.2	17.6
40°-50°	234.4	17.7
50°-60°	205.9	15.6
60°-70°	153.3	11.6
70°-80°	87.3	6.6
80°-90°	24.8	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°	382.7	29.0
0°-40°	615.8	46.6
0°-60°	1056.1	79.9
0°-90°	1321.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1321.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	508	508	508	508	508	
5°	508	506	501	506	505	48
15°	484	482	476	480	477	136
25°	439	437	431	431	430	202
35°	380	377	372	369	367	238
45°	311	310	304	299	296	240
55°	236	236	230	225	223	212
65°	161	159	155	151	150	159
75°	85	83	82	80	79	91
85°	23	22	22	21	21	26
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°	510.0	508.2	503.4	507.8	507.4
5°	508.2	506.0	501.2	505.6	504.7
7.5°	504.3	502.1	497.3	501.2	500.8
10°	499.1	496.9	491.2	495.1	494.3
12.5°	492.1	490.3	485.1	487.7	487.3
15°	483.8	482.0	476.4	479.8	477.2
17.5°	474.6	472.4	466.7	469.4	468.5
20°	464.1	461.5	455.8	457.6	456.3
22.5°	452.3	449.7	444.0	445.4	443.6
25°	439.2	436.6	430.9	431.4	430.1
27.5°	425.7	423.1	417.0	417.4	416.1
30°	410.9	408.7	402.6	402.6	399.5
32.5°	396.0	393.0	388.6	385.5	384.2
35°	379.9	377.2	371.6	368.9	366.8
37.5°	363.7	360.2	354.5	351.5	350.2
40°	346.7	344.1	337.9	334.5	332.7
42.5°	329.7	326.6	320.5	317.0	315.2
45°	311.3	309.6	303.9	298.7	296.5
47.5°	293.4	290.8	285.6	280.3	278.6
50°	275.1	272.9	267.2	262.4	259.8
52.5°	255.9	254.6	248.4	244.5	241.9
55°	236.2	235.8	230.1	225.3	223.1
57.5°	217.9	216.1	211.8	207.4	204.8
60°	197.8	197.4	192.1	188.2	186.0
62.5°	179.9	178.6	173.3	169.4	168.1
65°	161.1	158.9	154.6	151.1	149.8
67.5°	141.0	139.3	135.8	132.7	131.0
70°	123.1	120.5	117.9	114.8	112.6
72.5°	104.4	102.6	99.6	96.9	96.1
75°	85.1	83.4	82.1	79.9	78.6
77.5°	68.1	67.2	65.5	63.7	63.7
80°	51.5	50.2	49.3	48.9	48.9
82.5°	35.4	35.4	35.4	34.5	34.1
85°	22.7	21.8	21.8	21.0	21.0
87.5°	11.4	10.0	9.6	9.2	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)