

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: P333985

Luminaire Tested: **S123DW-S340D830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333985  
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: S123DW-S340D830-4F0-1E-UDD-F  
Description: DEFINE 3 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 340 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1245.6 lumens  
Efficiency: N/A  
Efficacy: 107.4 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

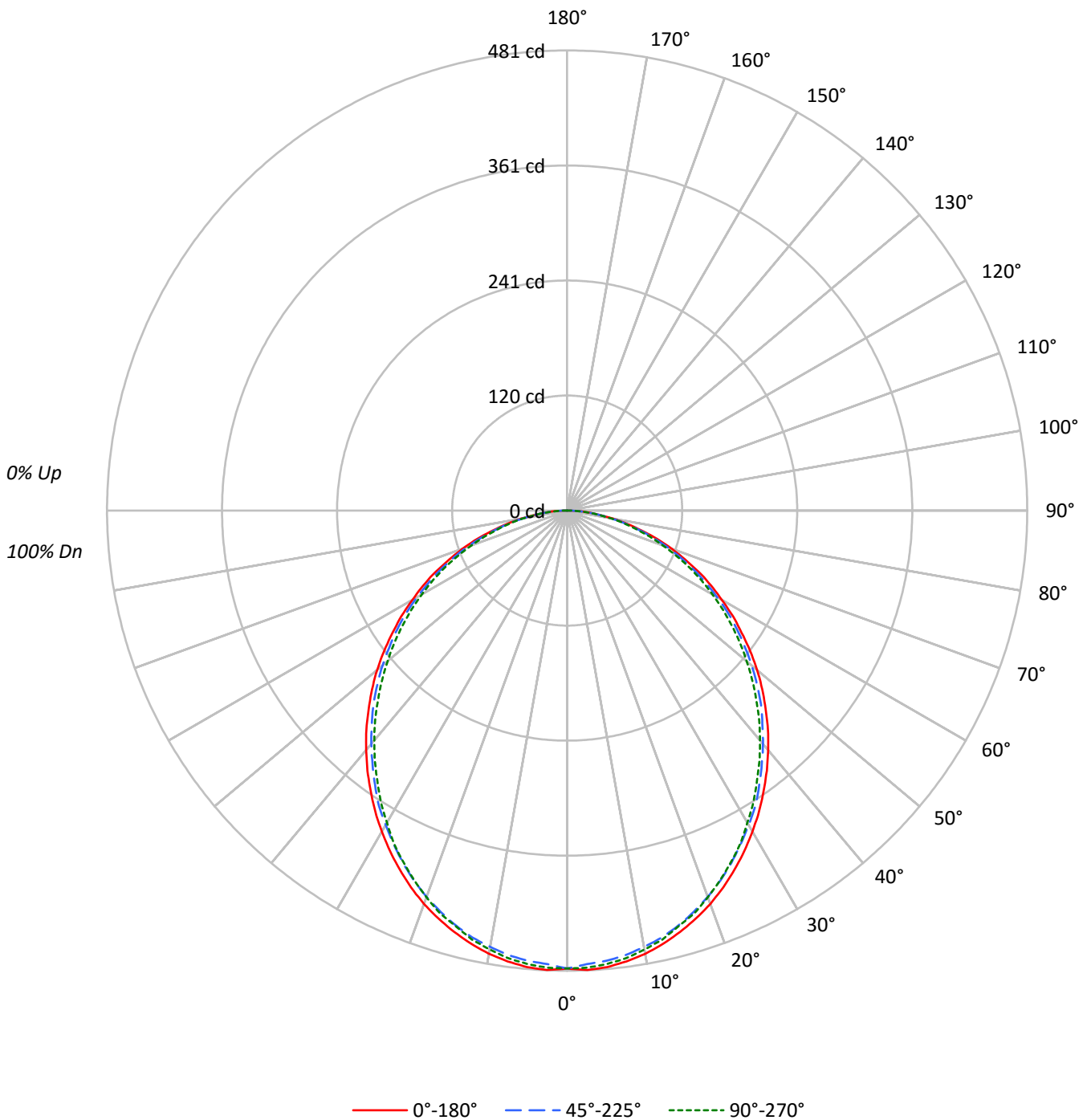
Input Watts (W): 11.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5152	5152	5152
5°	5176	5104	5140
10°	5141	5061	5092
15°	5081	5003	5012
20°	5011	4921	4927
25°	4917	4824	4815
30°	4814	4716	4681
35°	4704	4602	4543
40°	4592	4475	4406
45°	4466	4360	4253
50°	4342	4218	4101
55°	4177	4070	3947
60°	4013	3899	3774
65°	3869	3711	3596
70°	3654	3496	3342
75°	3335	3219	3082
80°	3013	2882	2858
85°	2643	2544	2445



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.1	3.6
10°-20°	127.4	10.2
20°-30°	188.2	15.1
30°-40°	219.8	17.6
40°-50°	220.9	17.7
50°-60°	194.1	15.6
60°-70°	144.5	11.6
70°-80°	82.3	6.6
80°-90°	23.4	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°	360.7	29.0
0°-40°	580.5	46.6
0°-60°	995.5	79.9
0°-90°	1245.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1245.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	479	477	472	477	476	45
15°	456	454	449	452	450	129
25°	414	412	406	407	405	191
35°	358	356	350	348	346	224
45°	293	292	286	282	279	227
55°	223	222	217	212	210	199
65°	152	150	146	142	141	150
75°	80	79	77	75	74	86
85°	21	21	21	20	20	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	478.6	478.6	478.6	478.6	478.6
2.5°	480.7	479.0	474.5	478.6	478.2
5°	479.0	477.0	472.4	476.6	475.7
7.5°	475.3	473.3	468.7	472.4	472.0
10°	470.4	468.3	463.0	466.7	465.9
12.5°	463.8	462.2	457.2	459.7	459.3
15°	456.0	454.3	449.0	452.3	449.8
17.5°	447.3	445.3	439.9	442.4	441.6
20°	437.5	435.0	429.6	431.3	430.1
22.5°	426.4	423.9	418.5	419.8	418.1
25°	414.0	411.5	406.2	406.6	405.4
27.5°	401.2	398.8	393.0	393.4	392.2
30°	387.3	385.2	379.4	379.4	376.6
32.5°	373.3	370.4	366.3	363.4	362.2
35°	358.0	355.6	350.2	347.7	345.7
37.5°	342.8	339.5	334.2	331.3	330.1
40°	326.8	324.3	318.5	315.2	313.6
42.5°	310.7	307.8	302.1	298.8	297.1
45°	293.4	291.8	286.4	281.5	279.4
47.5°	276.6	274.1	269.1	264.2	262.6
50°	259.3	257.2	251.9	247.3	244.9
52.5°	241.2	239.9	234.2	230.5	228.0
55°	222.6	222.2	216.9	212.4	210.3
57.5°	205.4	203.7	199.6	195.5	193.0
60°	186.4	186.0	181.1	177.4	175.3
62.5°	169.6	168.3	163.4	159.7	158.4
65°	151.9	149.8	145.7	142.4	141.2
67.5°	132.9	131.3	128.0	125.1	123.5
70°	116.1	113.6	111.1	108.2	106.2
72.5°	98.4	96.7	93.8	91.4	90.5
75°	80.2	78.6	77.4	75.3	74.1
77.5°	64.2	63.4	61.7	60.1	60.1
80°	48.6	47.3	46.5	46.1	46.1
82.5°	33.3	33.3	33.3	32.5	32.1
85°	21.4	20.6	20.6	19.8	19.8
87.5°	10.7	9.5	9.1	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)