

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: P334055

Luminaire Tested: **S123RDS-S340D830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334055  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDS-S340D830-4F0-1E-UDD-F  
Description: DEFINE 3 REGRESSED 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**

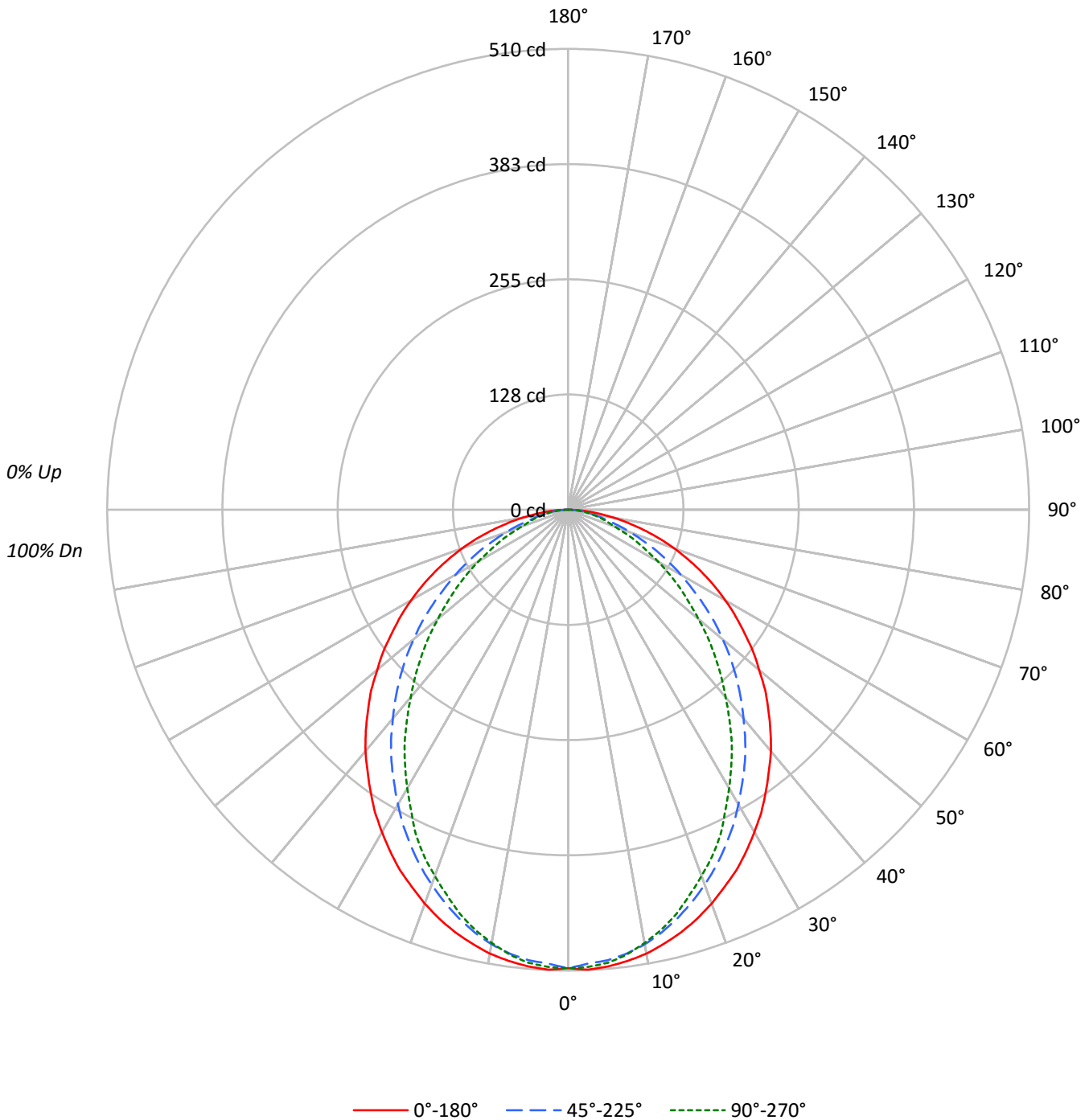
Lumens per Lamp: N/A  
Luminaire Lumens: 1146.4 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5462	5462	5462
5°	5482	5407	5438
10°	5452	5339	5321
15°	5394	5214	5159
20°	5313	5058	4940
25°	5229	4882	4727
30°	5120	4681	4425
35°	5008	4478	4147
40°	4904	4239	3805
45°	4768	4004	3495
50°	4617	3736	3150
55°	4465	3429	2826
60°	4323	3100	2471
65°	4141	2746	2117
70°	3912	2307	1709
75°	3577	1813	1609
80°	3186	1605	1481
85°	2692	1420	1321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.7	4.2
10°-20°	132.7	11.6
20°-30°	191.1	16.7
30°-40°	215.2	18.8
40°-50°	205.8	18.0
50°-60°	168.5	14.7
60°-70°	113.6	9.9
70°-80°	57.0	5.0
80°-90°	14.9	1.3
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°	371.5	32.4
0°-40°	586.6	51.2
0°-60°	960.9	83.8
0°-90°	1146.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1146.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	507	505	500	504	503	48
15°	484	479	468	466	463	136
25°	440	430	411	402	398	203
35°	381	366	341	323	316	239
45°	313	295	263	240	230	242
55°	238	218	183	159	151	213
65°	163	140	108	88	83	161
75°	86	66	44	40	39	92
85°	22	13	12	11	11	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	507.4	507.4	507.4	507.4	507.4
2.5°	509.5	507.8	502.9	507.4	506.6
5°	507.4	505.4	500.4	504.1	503.3
7.5°	503.7	501.7	495.5	498.0	496.7
10°	498.8	495.9	488.5	488.9	486.8
12.5°	491.8	488.5	479.0	478.6	476.1
15°	484.0	479.4	467.9	465.9	463.0
17.5°	474.5	469.6	455.2	451.0	446.9
20°	463.8	457.2	441.6	436.2	431.3
22.5°	451.9	444.0	427.2	420.2	415.7
25°	440.3	430.1	411.1	402.5	398.0
27.5°	426.4	415.2	394.7	383.1	376.1
30°	411.9	399.6	376.6	362.6	356.0
32.5°	397.5	383.1	358.4	342.8	335.8
35°	381.1	366.3	340.8	323.1	315.6
37.5°	364.6	348.6	321.8	302.1	293.0
40°	349.0	330.9	301.7	280.3	270.8
42.5°	331.3	313.2	282.7	258.9	250.6
45°	313.2	294.7	263.0	239.5	229.6
47.5°	295.5	274.9	243.6	218.1	209.5
50°	275.7	256.4	223.1	197.5	188.1
52.5°	258.0	236.6	203.7	177.0	168.7
55°	237.9	217.7	182.7	158.9	150.6
57.5°	219.8	197.9	162.6	139.9	132.9
60°	200.8	178.2	144.0	121.8	114.8
62.5°	181.9	159.3	125.1	104.5	97.1
65°	162.6	139.9	107.8	87.7	83.1
67.5°	143.2	120.2	88.9	73.7	68.7
70°	124.3	102.1	73.3	58.8	54.3
72.5°	105.4	83.5	58.0	46.9	45.7
75°	86.0	66.3	43.6	39.5	38.7
77.5°	68.3	50.2	34.2	31.7	30.9
80°	51.4	34.6	25.9	24.7	23.9
82.5°	35.4	21.4	18.5	17.3	17.3
85°	21.8	12.8	11.5	10.7	10.7
87.5°	9.9	5.3	5.3	4.9	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)