

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: P333891

Luminaire Tested: **S122RDW-S485D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333891  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122RDW-S485D840-4F0-1E-UDD-F  
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 485 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

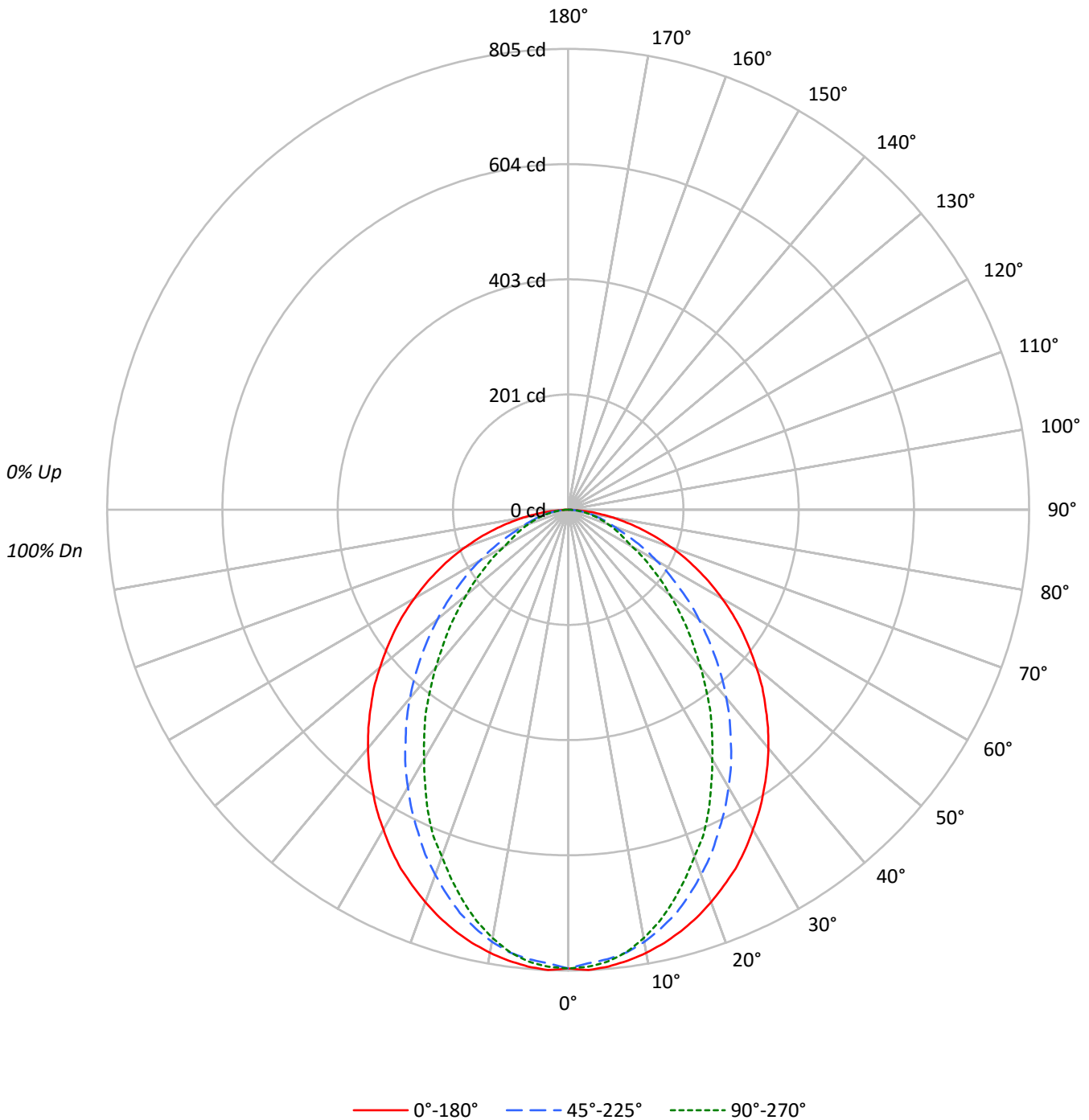
Lumens per Lamp: N/A  
Luminaire Lumens: 1647.9 lumens  
Efficiency: N/A  
Efficacy: 87.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 18.8  
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	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

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

	0°	45°	90°
0°	12936	12936	12936
5°	12985	12775	12844
10°	12886	12565	12458
15°	12739	12194	11841
20°	12534	11661	11076
25°	12324	11058	10334
30°	12031	10437	9381
35°	11747	9761	8546
40°	11462	9063	7581
45°	11127	8279	6706
50°	10783	7485	5848
55°	10429	6635	5022
60°	10020	5738	4169
65°	9559	4821	3794
70°	9002	3970	3493
75°	8322	3618	3256
80°	7345	3236	2966
85°	5780	2556	2556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.1	4.6
10°-20°	206.2	12.5
20°-30°	289.4	17.6
30°-40°	315.5	19.1
40°-50°	290.0	17.6
50°-60°	227.7	13.8
60°-70°	148.2	9.0
70°-80°	76.3	4.6
80°-90°	19.5	1.2
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°	570.7	34.6
0°-40°	886.2	53.8
0°-60°	1403.9	85.2
0°-90°	1647.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1647.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	801	798	788	795	792	76
15°	762	754	730	716	708	215
25°	692	668	621	591	580	318
35°	596	559	495	450	434	373
45°	487	439	363	311	294	376
55°	370	314	236	192	178	331
65°	250	191	126	102	99	248
75°	133	83	58	53	52	141
85°	31	16	14	14	14	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	801.2	801.2	801.2	801.2	801.2
2.5°	804.9	801.2	793.3	800.5	799.1
5°	801.2	797.6	788.2	794.7	792.5
7.5°	794.7	790.4	780.2	783.1	779.5
10°	786.0	780.9	766.4	764.3	759.9
12.5°	775.1	768.6	749.0	744.7	736.7
15°	762.1	754.1	729.5	715.7	708.4
17.5°	746.9	735.3	704.8	688.9	677.3
20°	729.5	715.0	678.7	660.6	644.6
22.5°	710.6	693.9	651.9	627.2	616.3
25°	691.8	668.5	620.7	591.0	580.1
27.5°	669.3	644.6	591.7	557.6	540.9
30°	645.3	617.8	559.8	522.8	503.2
32.5°	622.1	588.8	529.3	485.8	467.7
35°	596.0	559.1	495.2	449.6	433.6
37.5°	570.7	530.8	463.3	413.3	395.2
40°	543.8	500.3	430.0	378.5	359.7
42.5°	516.3	469.9	396.6	343.0	324.8
45°	487.3	438.7	362.6	311.1	293.7
47.5°	459.7	408.2	329.9	278.4	262.5
50°	429.3	377.8	298.0	248.0	232.8
52.5°	399.5	345.2	267.6	219.7	205.9
55°	370.5	314.0	235.7	192.2	178.4
57.5°	340.8	282.8	207.4	166.8	155.2
60°	310.3	252.3	177.7	140.7	129.1
62.5°	280.6	222.6	152.3	117.5	111.7
65°	250.2	191.4	126.2	101.5	99.3
67.5°	221.2	162.4	101.5	89.2	87.0
70°	190.7	134.1	84.1	76.9	74.0
72.5°	161.7	108.0	70.3	64.5	63.1
75°	133.4	82.7	58.0	52.9	52.2
77.5°	105.1	58.7	45.7	42.8	41.3
80°	79.0	42.1	34.8	31.9	31.9
82.5°	55.1	28.3	23.9	22.5	22.5
85°	31.2	16.0	13.8	13.8	13.8
87.5°	11.6	5.8	5.8	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)