

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: P242356

Luminaire Tested: **S122RDR-S865D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242356  
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: S122RDR-S865D927-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2295.8 lumens  
Efficiency: N/A  
Efficacy: 66.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct

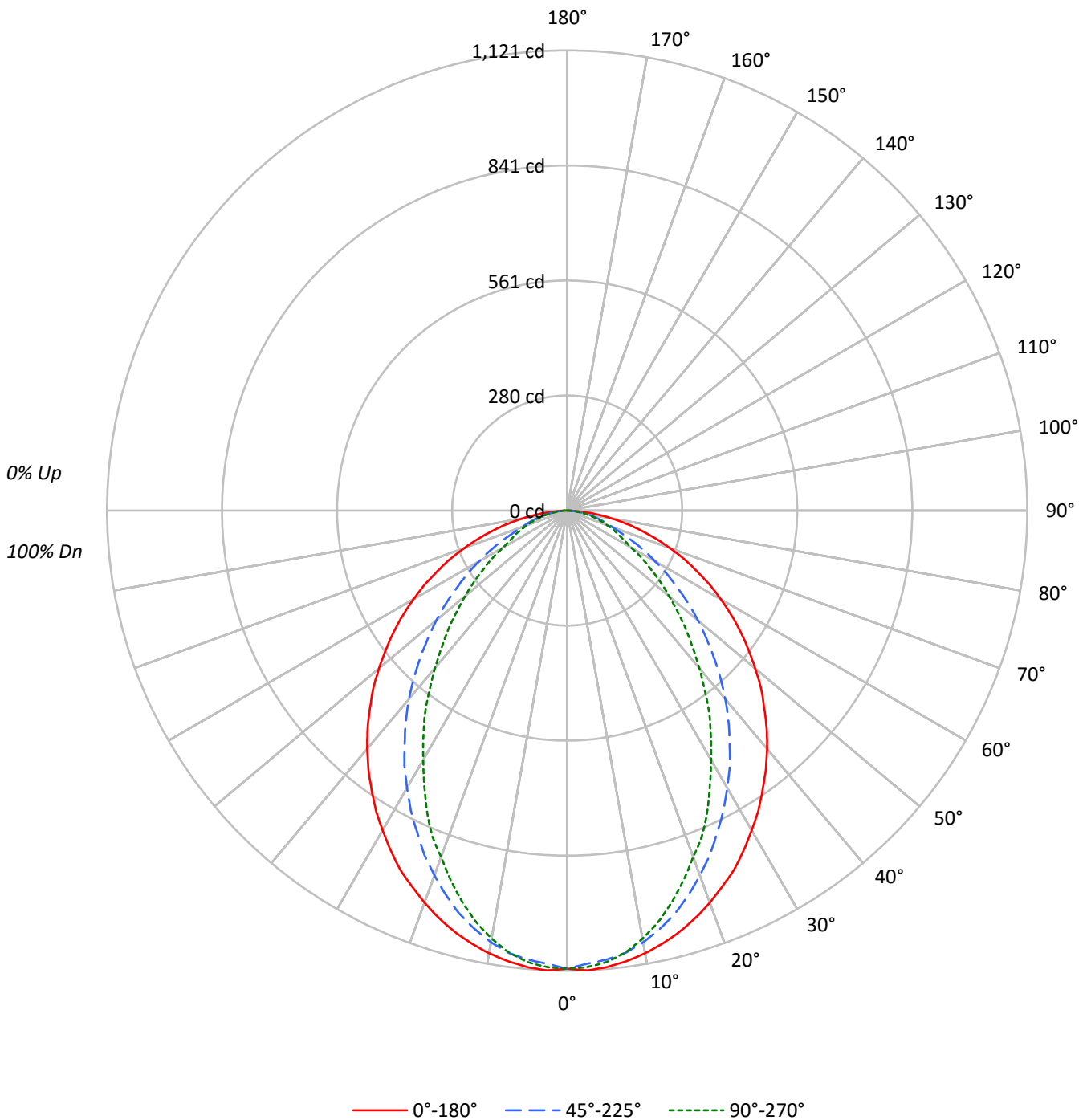
Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	21263	21263	21263
5°	21344	20996	21113
10°	21181	20653	20477
15°	20936	20041	19463
20°	20601	19167	18205
25°	20256	18175	16986
30°	19775	17153	15420
35°	19309	16045	14047
40°	18840	14897	12460
45°	18288	13606	11020
50°	17723	12304	9610
55°	17142	10902	8252
60°	16472	9429	6850
65°	15707	7923	6238
70°	14797	6527	5736
75°	13681	5946	5350
80°	12077	5320	4870
85°	9485	4196	4196



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.6	4.6
10°-20°	287.2	12.5
20°-30°	403.2	17.6
30°-40°	439.5	19.1
40°-50°	404.0	17.6
50°-60°	317.3	13.8
60°-70°	206.5	9.0
70°-80°	106.3	4.6
80°-90°	27.1	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°	795.1	34.6
0°-40°	1234.6	53.8
0°-60°	1955.8	85.2
0°-90°	2295.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2295.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1116	1111	1098	1107	1104	106
15°	1062	1051	1016	997	987	299
25°	964	931	865	823	808	443
35°	830	779	690	626	604	520
45°	679	611	505	433	409	524
55°	516	437	328	268	248	461
65°	348	267	176	141	138	346
75°	186	115	81	74	73	197
85°	43	22	19	19	19	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1116.3	1116.3	1116.3	1116.3	1116.3
2.5°	1121.4	1116.3	1105.2	1115.3	1113.3
5°	1116.3	1111.2	1098.1	1107.2	1104.2
7.5°	1107.2	1101.1	1087.0	1091.0	1086.0
10°	1095.1	1088.0	1067.8	1064.8	1058.7
12.5°	1079.9	1070.8	1043.6	1037.5	1026.4
15°	1061.7	1050.6	1016.3	997.1	987.0
17.5°	1040.5	1024.4	981.9	959.7	943.6
20°	1016.3	996.1	945.6	920.3	898.1
22.5°	990.0	966.8	908.2	873.8	858.7
25°	963.8	931.4	864.8	823.3	808.2
27.5°	932.4	898.1	824.3	776.9	753.6
30°	899.1	860.7	779.9	728.4	701.1
32.5°	866.8	820.3	737.5	676.9	651.6
35°	830.4	778.9	690.0	626.3	604.1
37.5°	795.0	739.5	645.5	575.8	550.6
40°	757.7	697.1	599.1	527.3	501.1
42.5°	719.3	654.6	552.6	477.8	452.6
45°	678.9	611.2	505.1	433.4	409.1
47.5°	640.5	568.8	459.7	387.9	365.7
50°	598.1	526.3	415.2	345.5	324.3
52.5°	556.6	480.9	372.8	306.1	286.9
55°	516.2	437.4	328.3	267.7	248.5
57.5°	474.8	394.0	288.9	232.4	216.2
60°	432.4	351.6	247.5	196.0	179.8
62.5°	391.0	310.1	212.1	163.7	155.6
65°	348.5	266.7	175.8	141.4	138.4
67.5°	308.1	226.3	141.4	124.3	121.2
70°	265.7	186.9	117.2	107.1	103.0
72.5°	225.3	150.5	98.0	89.9	87.9
75°	185.9	115.2	80.8	73.7	72.7
77.5°	146.5	81.8	63.6	59.6	57.6
80°	110.1	58.6	48.5	44.4	44.4
82.5°	76.8	39.4	33.3	31.3	31.3
85°	43.4	22.2	19.2	19.2	19.2
87.5°	16.2	8.1	8.1	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)