

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: P243238

Luminaire Tested: **S122RDR-H485D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243238  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-63)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122RDR-H485D935-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1364.4 lumens  
Efficiency: N/A  
Efficacy: 79.3 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

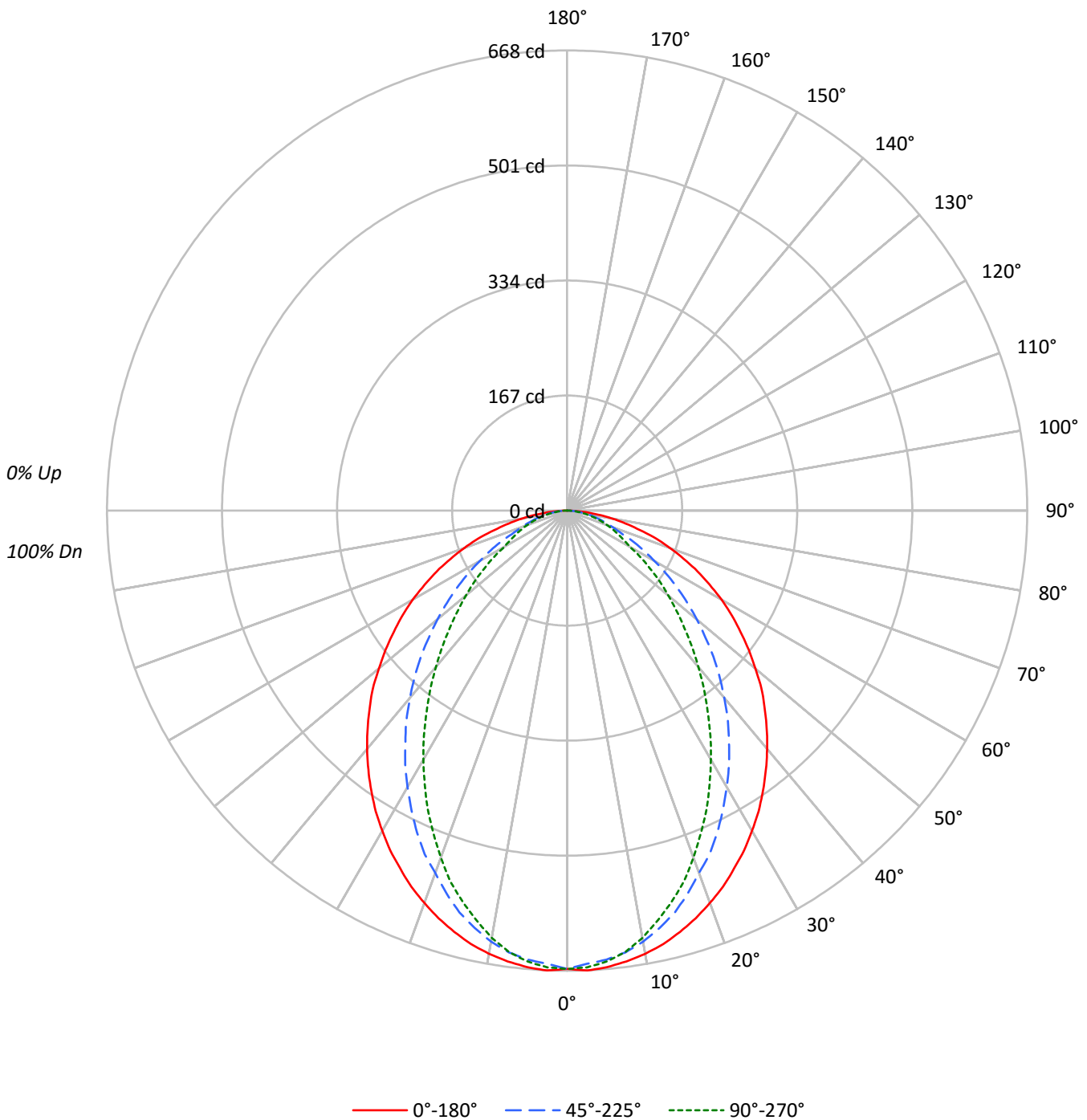
Input Watts (W): 17.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				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	77	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°	12672	12672	12672
5°	12721	12512	12566
10°	12634	12290	12179
15°	12485	11909	11579
20°	12288	11345	10867
25°	12051	10834	10061
30°	11804	10188	9178
35°	11531	9517	8262
40°	11232	8820	7365
45°	10918	8087	6478
50°	10564	7281	5681
55°	10198	6482	4898
60°	9863	5577	4000
65°	9415	4710	3700
70°	8855	3898	3453
75°	8066	3547	3172
80°	7240	3148	2830
85°	6032	2644	2513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.3	4.6
10°-20°	170.8	12.5
20°-30°	239.6	17.6
30°-40°	260.9	19.1
40°-50°	239.9	17.6
50°-60°	188.2	13.8
60°-70°	122.8	9.0
70°-80°	63.5	4.7
80°-90°	16.4	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°	472.6	34.6
0°-40°	733.6	53.8
0°-60°	1161.7	85.1
0°-90°	1364.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1364.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	665	662	654	659	657	63
15°	633	626	604	592	587	178
25°	573	553	516	490	479	264
35°	496	463	409	371	355	310
45°	405	364	300	257	240	313
55°	307	261	195	158	148	275
65°	209	158	104	85	82	206
75°	110	68	48	44	43	117
85°	28	13	12	12	12	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	665.3	665.3	665.3	665.3	665.3
2.5°	668.2	665.3	658.4	664.7	663.6
5°	665.3	661.8	654.4	659.0	657.2
7.5°	660.1	656.7	646.9	649.2	646.3
10°	653.2	648.6	635.4	633.1	629.7
12.5°	644.6	638.3	620.5	613.6	609.0
15°	633.1	625.7	603.9	591.8	587.2
17.5°	620.5	609.6	582.6	568.8	564.3
20°	606.2	593.5	559.7	545.3	536.1
22.5°	591.2	575.2	540.1	517.8	506.9
25°	573.4	553.3	515.5	490.2	478.7
27.5°	556.2	532.7	489.6	460.4	447.7
30°	536.7	510.9	463.2	429.4	417.3
32.5°	517.2	487.3	437.4	400.7	386.9
35°	495.9	463.2	409.3	371.4	355.3
37.5°	474.1	440.3	383.4	341.5	326.0
40°	451.7	413.9	354.7	311.1	296.2
42.5°	428.8	390.3	327.8	283.0	268.6
45°	405.3	363.9	300.2	256.6	240.5
47.5°	382.9	338.1	272.1	230.8	215.3
50°	356.5	312.3	245.7	203.8	191.7
52.5°	332.4	286.4	219.8	179.7	169.3
55°	307.1	261.2	195.2	158.4	147.5
57.5°	283.6	234.8	170.5	137.2	126.9
60°	258.9	209.5	146.4	116.0	105.0
62.5°	233.0	183.7	125.1	96.4	93.0
65°	208.9	158.4	104.5	85.0	82.1
67.5°	183.1	134.9	83.2	74.6	71.8
70°	159.0	111.9	70.0	63.7	62.0
72.5°	135.5	90.1	59.1	54.0	52.2
75°	109.6	68.3	48.2	44.2	43.1
77.5°	87.2	48.2	38.5	35.6	34.4
80°	66.0	35.0	28.7	27.0	25.8
82.5°	45.3	23.5	20.1	18.9	18.4
85°	27.6	13.2	12.1	11.5	11.5
87.5°	10.9	5.2	5.2	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)