

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: P242379

Luminaire Tested: **S122RDR-S675D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242379  
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-S675D935-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1956.7 lumens  
Efficiency: N/A  
Efficacy: 74.4 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

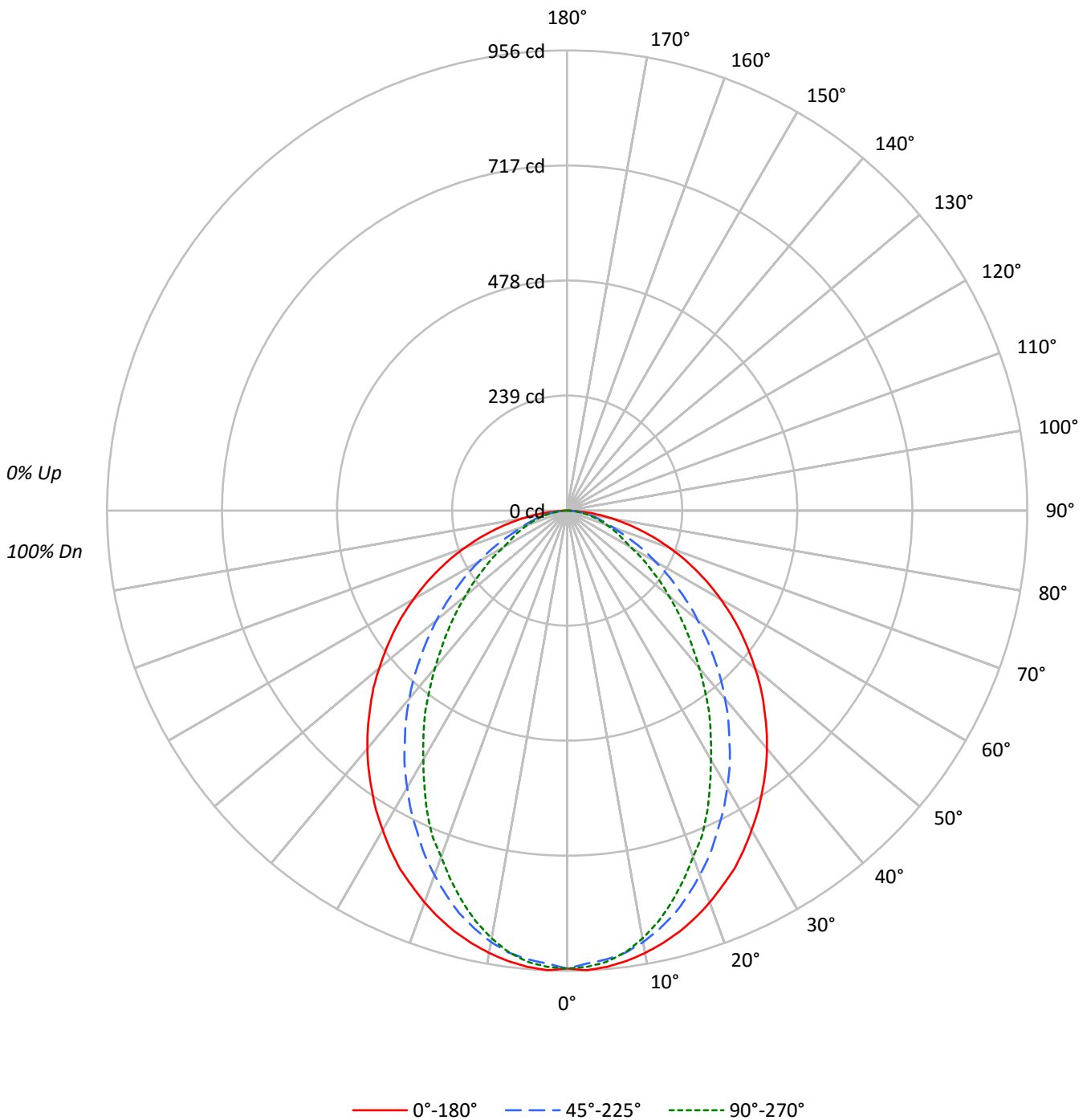
Input Watts (W): 26.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	18122	18122	18122
5°	18191	17895	17994
10°	18051	17603	17452
15°	17844	17081	16588
20°	17558	16336	15515
25°	17263	15489	14476
30°	16854	14620	13142
35°	16456	13675	11973
40°	16055	12696	10620
45°	15586	11597	9393
50°	15104	10487	8191
55°	14612	9292	7034
60°	14038	8034	5840
65°	13386	6752	5318
70°	12609	5564	4890
75°	11657	5071	4563
80°	10289	4530	4157
85°	8086	3584	3584



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.2	4.6
10°-20°	244.8	12.5
20°-30°	343.7	17.6
30°-40°	374.6	19.1
40°-50°	344.3	17.6
50°-60°	270.4	13.8
60°-70°	176.0	9.0
70°-80°	90.6	4.6
80°-90°	23.1	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°	677.6	34.6
0°-40°	1052.2	53.8
0°-60°	1666.9	85.2
0°-90°	1956.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1956.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	951	951	951	951	951	
5°	951	947	936	944	941	90
15°	905	895	866	850	841	255
25°	821	794	737	702	689	378
35°	708	664	588	534	515	443
45°	579	521	430	369	349	447
55°	440	373	280	228	212	393
65°	297	227	150	120	118	294
75°	158	98	69	63	62	168
85°	37	19	16	16	16	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	951.4	951.4	951.4	951.4	951.4
2.5°	955.7	951.4	941.9	950.5	948.8
5°	951.4	947.1	935.9	943.7	941.1
7.5°	943.7	938.5	926.4	929.9	925.6
10°	933.3	927.3	910.1	907.5	902.3
12.5°	920.4	912.7	889.4	884.2	874.8
15°	904.9	895.4	866.2	849.8	841.2
17.5°	886.8	873.1	836.9	817.9	804.2
20°	866.2	848.9	805.9	784.4	765.4
22.5°	843.8	824.0	774.0	744.8	731.8
25°	821.4	793.8	737.0	701.7	688.8
27.5°	794.7	765.4	702.6	662.1	642.3
30°	766.3	733.6	664.7	620.8	597.5
32.5°	738.7	699.1	628.5	576.9	555.3
35°	707.7	663.8	588.1	533.8	514.9
37.5°	677.6	630.3	550.2	490.8	469.2
40°	645.7	594.1	510.6	449.4	427.1
42.5°	613.0	557.9	471.0	407.3	385.7
45°	578.6	520.9	430.5	369.4	348.7
47.5°	545.9	484.7	391.8	330.6	311.7
50°	509.7	448.6	353.9	294.5	276.4
52.5°	474.4	409.8	317.7	260.9	244.5
55°	440.0	372.8	279.8	228.2	211.8
57.5°	404.7	335.8	246.2	198.0	184.3
60°	368.5	299.6	210.9	167.0	153.3
62.5°	333.2	264.3	180.8	139.5	132.6
65°	297.0	227.3	149.8	120.5	118.0
67.5°	262.6	192.9	120.5	105.9	103.3
70°	226.4	159.3	99.9	91.3	87.8
72.5°	192.0	128.3	83.5	76.6	74.9
75°	158.4	98.2	68.9	62.9	62.0
77.5°	124.8	69.7	54.2	50.8	49.1
80°	93.8	49.9	41.3	37.9	37.9
82.5°	65.4	33.6	28.4	26.7	26.7
85°	37.0	18.9	16.4	16.4	16.4
87.5°	13.8	6.9	6.9	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)