

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: P243215

Luminaire Tested: **S122RDR-H675D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243215  
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-H675D927-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

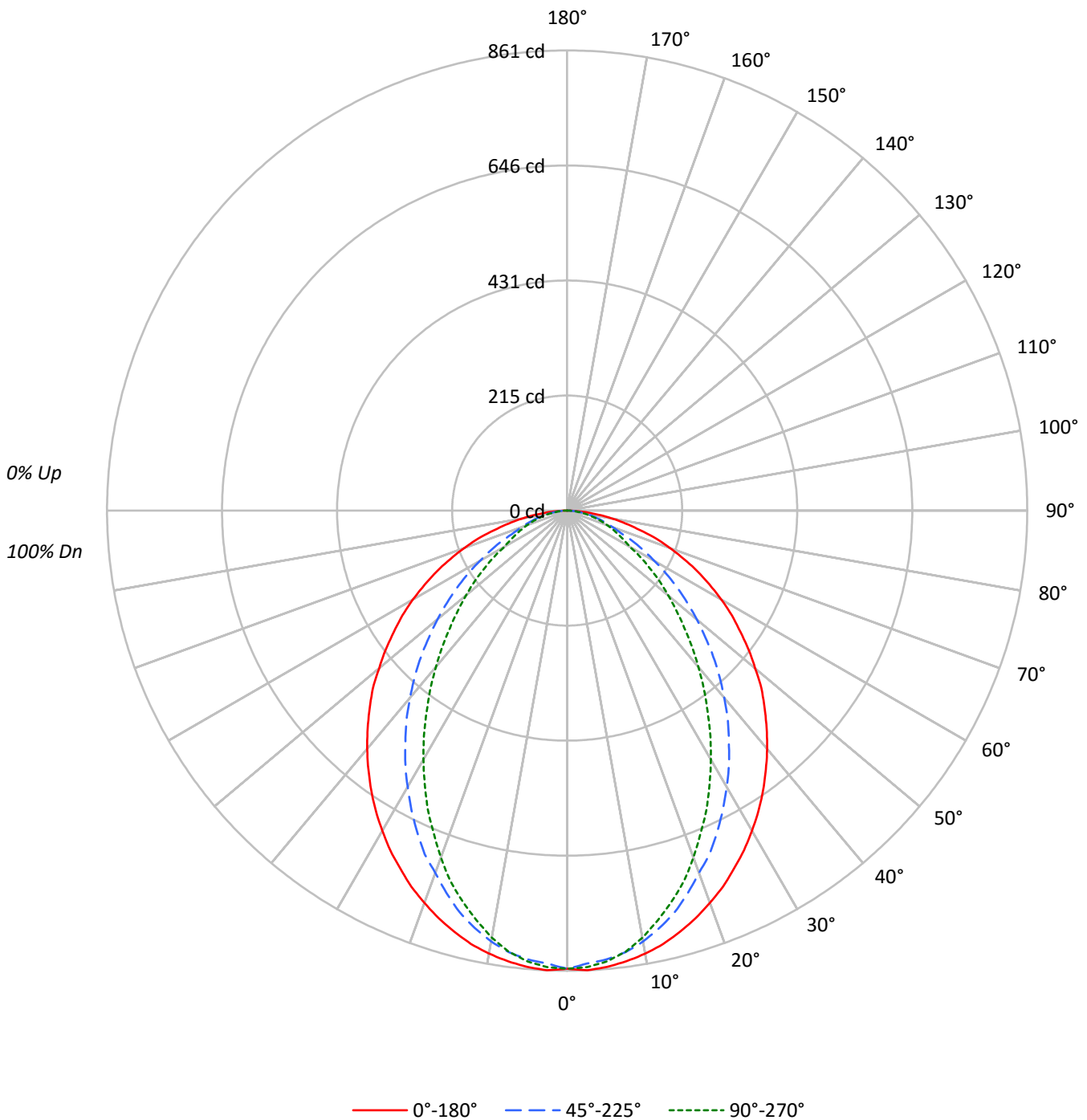
Lumens per Lamp: N/A  
Luminaire Lumens: 1758.1 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.6  
Input Voltage (V): 120  
Input Current (Ain): 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	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°	16328	16328	16328
5°	16390	16122	16193
10°	16280	15837	15694
15°	16087	15344	14922
20°	15833	14619	14003
25°	15529	13959	12965
30°	15211	13128	11826
35°	14861	12264	10645
40°	14474	11366	9491
45°	14067	10419	8348
50°	13610	9382	7319
55°	13141	8352	6313
60°	12709	7185	5158
65°	12133	6067	4768
70°	11411	5023	4450
75°	10399	4570	4085
80°	9335	4059	3653
85°	7758	3387	3235



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.3	4.6
10°-20°	220.1	12.5
20°-30°	308.7	17.6
30°-40°	336.2	19.1
40°-50°	309.1	17.6
50°-60°	242.5	13.8
60°-70°	158.2	9.0
70°-80°	81.8	4.7
80°-90°	21.2	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°	609.0	34.6
0°-40°	945.3	53.8
0°-60°	1496.9	85.1
0°-90°	1758.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1758.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	857	857	857	857	857	
5°	857	853	843	849	847	81
15°	816	806	778	763	757	230
25°	739	713	664	632	617	341
35°	639	597	527	478	458	400
45°	522	469	387	331	310	403
55°	396	336	252	204	190	355
65°	269	204	135	110	106	266
75°	141	88	62	57	56	151
85°	36	17	16	15	15	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	857.2	857.2	857.2	857.2	857.2
2.5°	860.9	857.2	848.4	856.5	855.0
5°	857.2	852.8	843.2	849.1	846.9
7.5°	850.6	846.2	833.6	836.5	832.8
10°	841.7	835.8	818.8	815.8	811.4
12.5°	830.6	822.5	799.6	790.7	784.8
15°	815.8	806.2	778.1	762.6	756.7
17.5°	799.6	785.5	750.7	733.0	727.1
20°	781.1	764.8	721.2	702.7	690.8
22.5°	761.8	741.1	696.0	667.2	653.1
25°	738.9	713.0	664.2	631.7	616.9
27.5°	716.7	686.4	630.9	593.2	576.9
30°	691.6	658.3	596.9	553.3	537.7
32.5°	666.4	628.0	563.6	516.3	498.5
35°	639.1	596.9	527.4	478.5	457.8
37.5°	610.9	567.3	494.1	440.1	420.1
40°	582.1	533.3	457.1	400.9	381.7
42.5°	552.5	503.0	422.3	364.6	346.2
45°	522.2	468.9	386.8	330.6	309.9
47.5°	493.3	435.7	350.6	297.3	277.4
50°	459.3	402.4	316.6	262.6	247.0
52.5°	428.3	369.1	283.3	231.5	218.2
55°	395.7	336.5	251.5	204.1	190.1
57.5°	365.4	302.5	219.7	176.8	163.5
60°	333.6	270.0	188.6	149.4	135.4
62.5°	300.3	236.7	161.2	124.3	119.8
65°	269.2	204.1	134.6	109.5	105.8
67.5°	235.9	173.8	107.2	96.2	92.5
70°	204.9	144.2	90.2	82.1	79.9
72.5°	174.6	116.1	76.2	69.5	67.3
75°	141.3	88.0	62.1	57.0	55.5
77.5°	112.4	62.1	49.6	45.9	44.4
80°	85.1	45.1	37.0	34.8	33.3
82.5°	58.4	30.3	25.9	24.4	23.7
85°	35.5	17.0	15.5	14.8	14.8
87.5°	14.1	6.7	6.7	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)