

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: P242252

Luminaire Tested: **S122DR-S675D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242252  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DR-S675D927-X4F0-XX-UDD-F-W  
Description: DEFINE 2 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: 2096.0 lumens  
Efficiency: N/A  
Efficacy: 79.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct

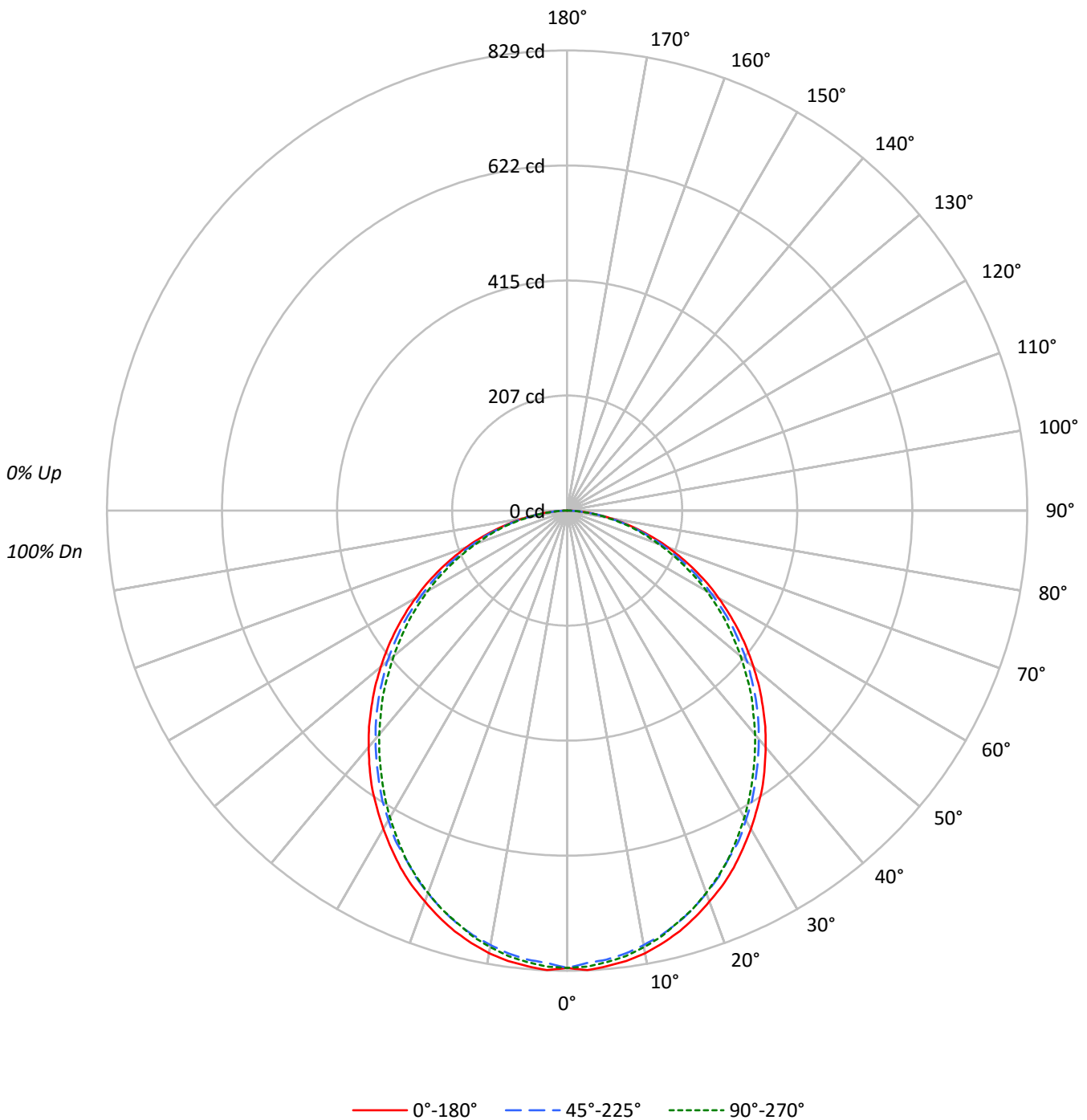
Input Watts (W): 26.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76		83	78	74		80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48		59	52	47		57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28		38	32	27		37	32	27	26

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

	0°	45°	90°
0°	15693	15693	15693
5°	15753	15526	15616
10°	15659	15369	15444
15°	15466	15168	15153
20°	15190	14870	14854
25°	14918	14502	14502
30°	14567	14164	14043
35°	14240	13761	13556
40°	13827	13355	13099
45°	13423	12954	12634
50°	12982	12535	12090
55°	12523	12048	11603
60°	12011	11467	11044
65°	11461	10889	10389
70°	10765	10192	9707
75°	9795	9383	9155
80°	8688	8424	7997
85°	7103	6753	6054



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.5	3.7
10°-20°	218.2	10.4
20°-30°	320.6	15.3
30°-40°	372.4	17.8
40°-50°	371.9	17.7
50°-60°	324.3	15.5
60°-70°	239.7	11.4
70°-80°	135.6	6.5
80°-90°	35.8	1.7
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°	616.3	29.4
0°-40°	988.7	47.2
0°-60°	1684.9	80.4
0°-90°	2096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2096.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	824	824	824	824	824	
5°	824	821	812	818	817	78
15°	784	780	769	772	768	221
25°	710	704	690	692	690	327
35°	612	604	592	587	583	382
45°	498	493	481	472	469	385
55°	377	372	363	353	349	337
65°	254	250	242	234	230	251
75°	133	132	128	123	124	142
85°	32	32	31	28	28	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	823.9	823.9	823.9	823.9	823.9
2.5°	828.6	824.7	815.9	823.9	822.3
5°	823.9	820.7	812.0	818.3	816.7
7.5°	818.3	813.6	804.9	811.2	809.6
10°	809.6	804.1	794.6	800.9	798.5
12.5°	797.7	793.0	783.5	787.4	785.8
15°	784.3	779.5	769.2	772.4	768.4
17.5°	767.6	762.9	752.6	756.5	752.6
20°	749.4	744.7	733.6	735.9	732.8
22.5°	731.2	724.1	713.8	713.8	712.2
25°	709.8	703.5	690.0	691.6	690.0
27.5°	686.0	680.5	670.2	667.8	663.8
30°	662.3	655.9	644.0	641.7	638.5
32.5°	636.9	632.2	619.5	614.7	611.6
35°	612.4	604.4	591.8	587.0	583.0
37.5°	584.6	577.5	564.8	559.3	555.3
40°	556.1	549.8	537.1	530.0	526.8
42.5°	528.4	522.0	509.4	501.5	496.7
45°	498.3	492.7	480.9	472.1	469.0
47.5°	469.0	463.4	450.8	442.0	437.3
50°	438.1	434.1	423.0	411.9	408.0
52.5°	408.0	402.4	392.1	383.4	377.9
55°	377.1	372.3	362.8	353.3	349.4
57.5°	346.2	342.2	331.9	322.4	319.2
60°	315.3	312.1	301.0	292.3	289.9
62.5°	285.2	279.6	271.7	263.8	260.6
65°	254.3	249.5	241.6	234.5	230.5
67.5°	222.6	218.6	211.5	206.0	202.8
70°	193.3	190.1	183.0	177.4	174.3
72.5°	163.2	160.0	156.1	150.5	148.1
75°	133.1	131.5	127.5	122.8	124.4
77.5°	106.2	103.0	101.4	99.0	96.6
80°	79.2	78.4	76.8	74.5	72.9
82.5°	53.9	53.9	53.1	49.9	49.9
85°	32.5	31.7	30.9	28.5	27.7
87.5°	14.3	12.7	11.1	8.7	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)