

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: P242360

Luminaire Tested: **S122RDR-S675D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242360  
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-S675D830-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2142.0 lumens  
Efficiency: N/A  
Efficacy: 81.4 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

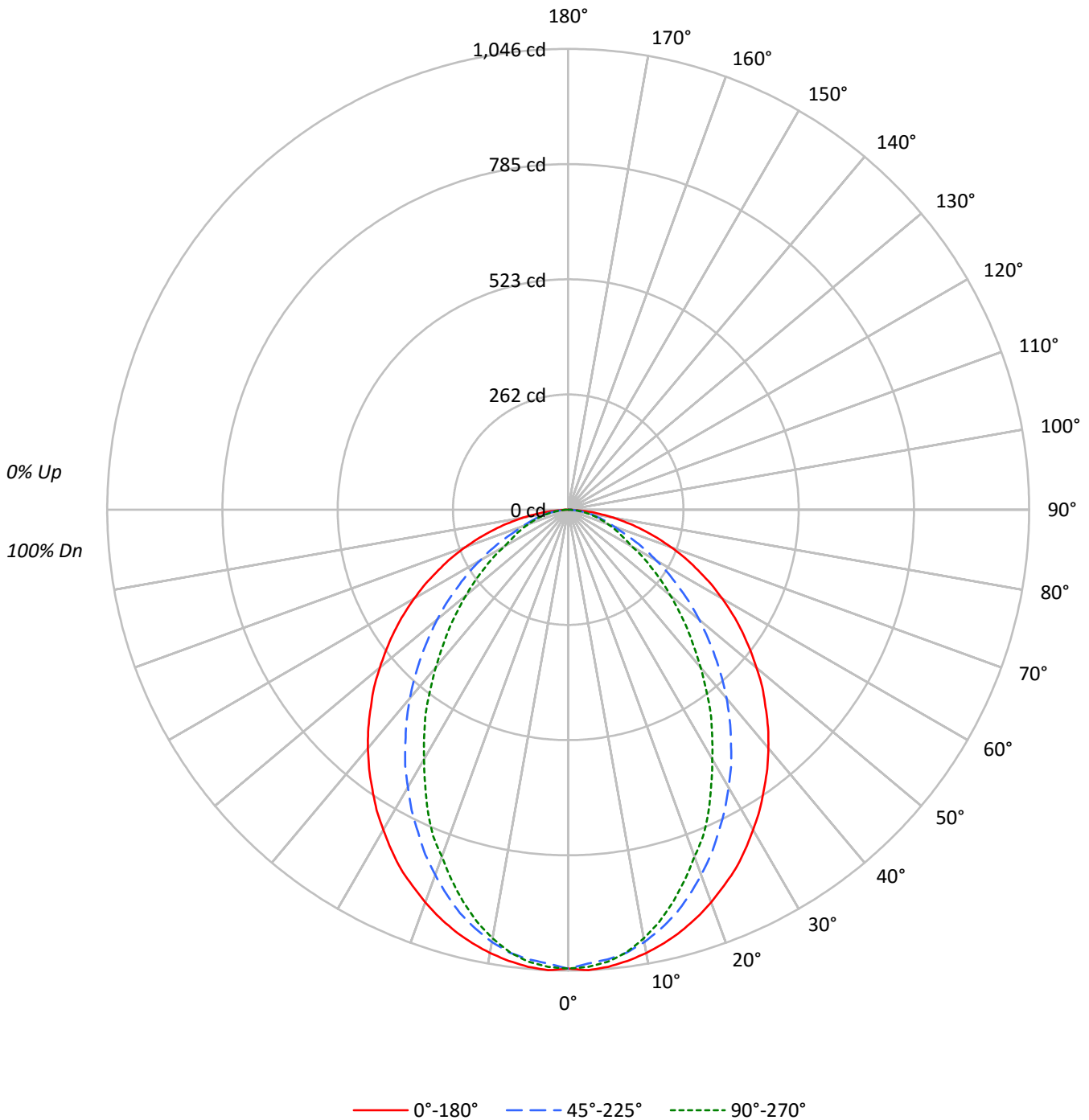
Input Watts (W): 26.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	19838	19838	19838
5°	19914	19589	19698
10°	19761	19270	19106
15°	19534	18698	18160
20°	19220	17882	16984
25°	18898	16956	15847
30°	18451	16003	14387
35°	18016	14970	13105
40°	17577	13897	11624
45°	17062	12696	10282
50°	16535	11480	8967
55°	15993	10172	7701
60°	15368	8796	6392
65°	14657	7392	5819
70°	13806	6087	5352
75°	12761	5549	4997
80°	11265	4958	4552
85°	8851	3912	3912



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.6	4.6
10°-20°	268.0	12.5
20°-30°	376.2	17.6
30°-40°	410.1	19.1
40°-50°	376.9	17.6
50°-60°	296.0	13.8
60°-70°	192.7	9.0
70°-80°	99.2	4.6
80°-90°	25.3	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°	741.8	34.6
0°-40°	1151.9	53.8
0°-60°	1824.8	85.2
0°-90°	2142.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2142.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1042	1042	1042	1042	1042	
5°	1042	1037	1024	1033	1030	99
15°	991	980	948	930	921	279
25°	899	869	807	768	754	414
35°	775	727	644	584	564	485
45°	633	570	471	404	382	489
55°	482	408	306	250	232	430
65°	325	249	164	132	129	322
75°	173	107	75	69	68	183
85°	40	21	18	18	18	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1041.5	1041.5	1041.5	1041.5	1041.5
2.5°	1046.2	1041.5	1031.1	1040.6	1038.7
5°	1041.5	1036.8	1024.5	1033.0	1030.2
7.5°	1033.0	1027.4	1014.2	1017.9	1013.2
10°	1021.7	1015.1	996.3	993.4	987.8
12.5°	1007.6	999.1	973.6	968.0	957.6
15°	990.6	980.2	948.2	930.3	920.9
17.5°	970.8	955.7	916.1	895.4	880.3
20°	948.2	929.3	882.2	858.7	837.9
22.5°	923.7	902.0	847.3	815.3	801.2
25°	899.2	869.0	806.8	768.2	754.0
27.5°	870.0	837.9	769.1	724.8	703.1
30°	838.9	803.0	727.6	679.6	654.1
32.5°	808.7	765.3	688.1	631.5	607.9
35°	774.8	726.7	643.8	584.4	563.6
37.5°	741.8	689.9	602.3	537.2	513.7
40°	706.9	650.4	558.9	492.0	467.5
42.5°	671.1	610.8	515.6	445.8	422.3
45°	633.4	570.2	471.3	404.3	381.7
47.5°	597.6	530.7	428.9	361.9	341.2
50°	558.0	491.1	387.4	322.3	302.6
52.5°	519.3	448.6	347.8	285.6	267.7
55°	481.6	408.1	306.3	249.8	231.9
57.5°	443.0	367.6	269.6	216.8	201.7
60°	403.4	328.0	230.9	182.9	167.8
62.5°	364.8	289.4	197.9	152.7	145.2
65°	325.2	248.8	164.0	132.0	129.1
67.5°	287.5	211.1	132.0	115.9	113.1
70°	247.9	174.4	109.3	99.9	96.1
72.5°	210.2	140.4	91.4	83.9	82.0
75°	173.4	107.4	75.4	68.8	67.9
77.5°	136.7	76.3	59.4	55.6	53.7
80°	102.7	54.7	45.2	41.5	41.5
82.5°	71.6	36.8	31.1	29.2	29.2
85°	40.5	20.7	17.9	17.9	17.9
87.5°	15.1	7.5	7.5	6.6	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)