

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: P243220

Luminaire Tested: **S122RDR-H675D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243220
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-H675D830-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2091.8 lumens
Efficiency: N/A
Efficacy: 88.6 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

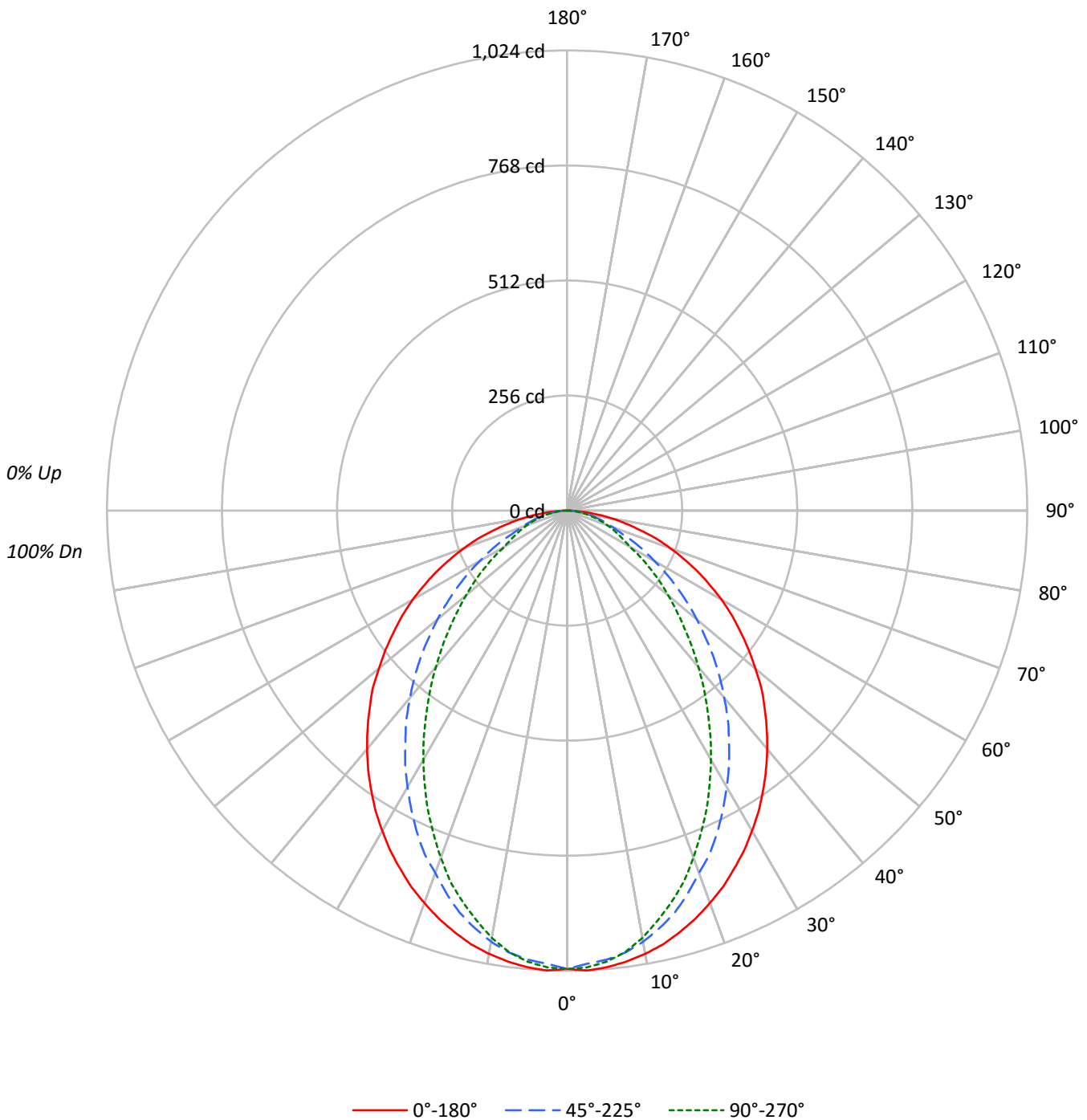
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	19429	19429	19429
5°	19503	19182	19266
10°	19371	18843	18672
15°	19142	18256	17754
20°	18837	17392	16662
25°	18478	16610	15424
30°	18097	15620	14072
35°	17679	14591	12666
40°	17222	13524	11291
45°	16736	12399	9932
50°	16194	11163	8709
55°	15635	9936	7512
60°	15120	8549	6133
65°	14436	7220	5670
70°	13578	5981	5291
75°	12371	5439	4857
80°	11101	4826	4344
85°	9223	4043	3846



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.5	4.6
10°-20°	261.8	12.5
20°-30°	367.3	17.6
30°-40°	400.1	19.1
40°-50°	367.7	17.6
50°-60°	288.6	13.8
60°-70°	188.2	9.0
70°-80°	97.4	4.7
80°-90°	25.2	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°	724.6	34.6
0°-40°	1124.7	53.8
0°-60°	1781.0	85.1
0°-90°	2091.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2091.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	1020	1015	1003	1010	1008	97
15°	971	959	926	907	900	274
25°	879	848	790	752	734	405
35°	760	710	628	569	545	475
45°	621	558	460	393	369	480
55°	471	400	299	243	226	422
65°	320	243	160	130	126	316
75°	168	105	74	68	66	180
85°	42	20	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°	1020.0	1020.0	1020.0	1020.0	1020.0
2.5°	1024.4	1020.0	1009.4	1019.1	1017.3
5°	1020.0	1014.7	1003.2	1010.3	1007.6
7.5°	1012.0	1006.8	991.8	995.3	990.9
10°	1001.5	994.4	974.2	970.7	965.4
12.5°	988.3	978.6	951.3	940.8	933.7
15°	970.7	959.2	925.8	907.3	900.3
17.5°	951.3	934.6	893.2	872.1	865.1
20°	929.3	910.0	858.0	836.0	822.0
22.5°	906.4	881.8	828.1	793.8	777.1
25°	879.2	848.4	790.3	751.5	733.9
27.5°	852.8	816.7	750.7	705.8	686.4
30°	822.8	783.2	710.2	658.3	639.8
32.5°	792.9	747.1	670.6	614.3	593.1
35°	760.3	710.2	627.5	569.4	544.7
37.5°	726.9	675.0	587.9	523.6	499.9
40°	692.6	634.5	543.9	477.0	454.1
42.5°	657.4	598.4	502.5	433.9	411.9
45°	621.3	557.9	460.3	393.4	368.7
47.5°	587.0	518.3	417.1	353.8	330.0
50°	546.5	478.7	376.7	312.4	293.9
52.5°	509.5	439.1	337.1	275.5	259.6
55°	470.8	400.4	299.2	242.9	226.2
57.5°	434.7	359.9	261.4	210.3	194.5
60°	396.9	321.2	224.4	177.8	161.0
62.5°	357.3	281.6	191.8	147.8	142.6
65°	320.3	242.9	160.2	130.2	125.8
67.5°	280.7	206.8	127.6	114.4	110.0
70°	243.8	171.6	107.4	97.7	95.0
72.5°	207.7	138.2	90.6	82.7	80.1
75°	168.1	104.7	73.9	67.8	66.0
77.5°	133.8	73.9	59.0	54.6	52.8
80°	101.2	53.7	44.0	41.4	39.6
82.5°	69.5	36.1	30.8	29.0	28.2
85°	42.2	20.2	18.5	17.6	17.6
87.5°	16.7	7.9	7.9	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)