

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: P243242

Luminaire Tested: **S122RDR-H290D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243242
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-H290D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 887.3 lumens
Efficiency: N/A
Efficacy: 79.2 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

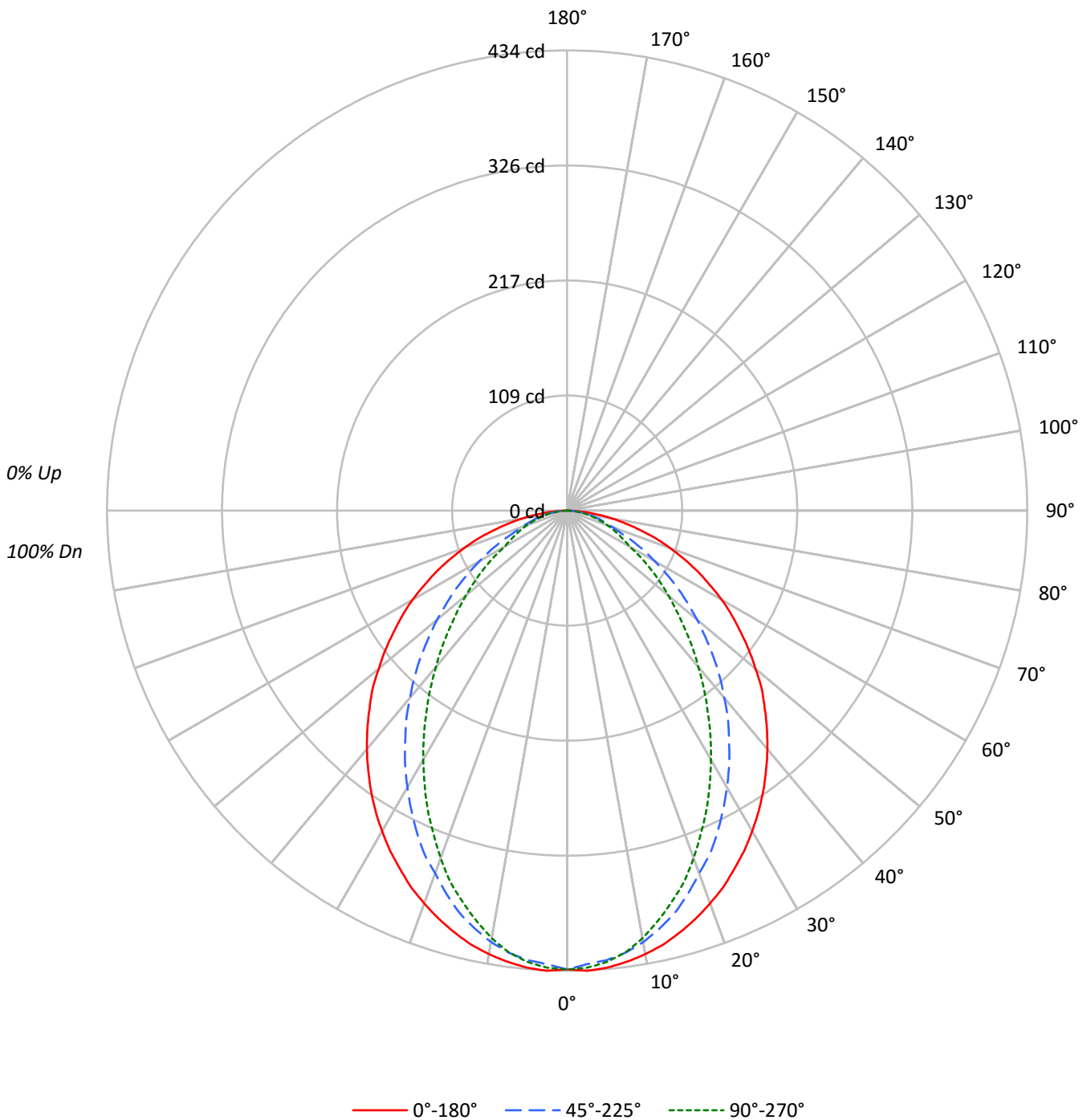
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8242	8242	8242
5°	8273	8138	8172
10°	8216	7992	7920
15°	8119	7744	7531
20°	7990	7378	7068
25°	7837	7045	6543
30°	7676	6627	5969
35°	7499	6190	5374
40°	7305	5736	4789
45°	7098	5258	4213
50°	6869	4735	3695
55°	6632	4214	3185
60°	6415	3627	2602
65°	6125	3060	2407
70°	5759	2534	2244
75°	5247	2311	2061
80°	4706	2051	1843
85°	3912	1705	1639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	4.6
10°-20°	111.1	12.5
20°-30°	155.8	17.6
30°-40°	169.7	19.1
40°-50°	156.0	17.6
50°-60°	122.4	13.8
60°-70°	79.8	9.0
70°-80°	41.3	4.7
80°-90°	10.7	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°	307.4	34.6
0°-40°	477.1	53.8
0°-60°	755.5	85.1
0°-90°	887.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	887.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	433	433	433	433	433	
5°	433	430	426	428	427	41
15°	412	407	393	385	382	116
25°	373	360	335	319	311	172
35°	322	301	266	242	231	202
45°	264	237	195	167	156	203
55°	200	170	127	103	96	179
65°	136	103	68	55	53	134
75°	71	44	31	29	28	76
85°	18	9	8	8	8	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	432.7	432.7	432.7	432.7	432.7
2.5°	434.5	432.7	428.2	432.3	431.5
5°	432.7	430.4	425.6	428.5	427.4
7.5°	429.3	427.1	420.7	422.2	420.3
10°	424.8	421.8	413.2	411.7	409.5
12.5°	419.2	415.1	403.5	399.1	396.1
15°	411.7	406.9	392.7	384.9	381.9
17.5°	403.5	396.4	378.9	369.9	367.0
20°	394.2	386.0	364.0	354.6	348.7
22.5°	384.5	374.0	351.3	336.7	329.6
25°	372.9	359.9	335.2	318.8	311.3
27.5°	361.7	346.4	318.4	299.4	291.2
30°	349.0	332.2	301.3	279.2	271.4
32.5°	336.3	316.9	284.5	260.6	251.6
35°	322.5	301.3	266.2	241.5	231.1
37.5°	308.3	286.3	249.4	222.1	212.0
40°	293.8	269.1	230.7	202.3	192.6
42.5°	278.9	253.8	213.2	184.0	174.7
45°	263.5	236.7	195.2	166.9	156.4
47.5°	249.0	219.9	176.9	150.1	140.0
50°	231.8	203.1	159.8	132.5	124.7
52.5°	216.1	186.3	143.0	116.8	110.1
55°	199.7	169.9	126.9	103.0	95.9
57.5°	184.4	152.7	110.9	89.2	82.5
60°	168.4	136.3	95.2	75.4	68.3
62.5°	151.6	119.5	81.4	62.7	60.5
65°	135.9	103.0	67.9	55.2	53.4
67.5°	119.1	87.7	54.1	48.5	46.7
70°	103.4	72.8	45.5	41.4	40.3
72.5°	88.1	58.6	38.4	35.1	34.0
75°	71.3	44.4	31.4	28.7	28.0
77.5°	56.7	31.4	25.0	23.1	22.4
80°	42.9	22.8	18.7	17.5	16.8
82.5°	29.5	15.3	13.1	12.3	11.9
85°	17.9	8.6	7.8	7.5	7.5
87.5°	7.1	3.4	3.4	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)