

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: P243223

Luminaire Tested: **S122RDR-H290D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243223
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-H290D835-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 995.1 lumens
Efficiency: N/A
Efficacy: 88.8 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

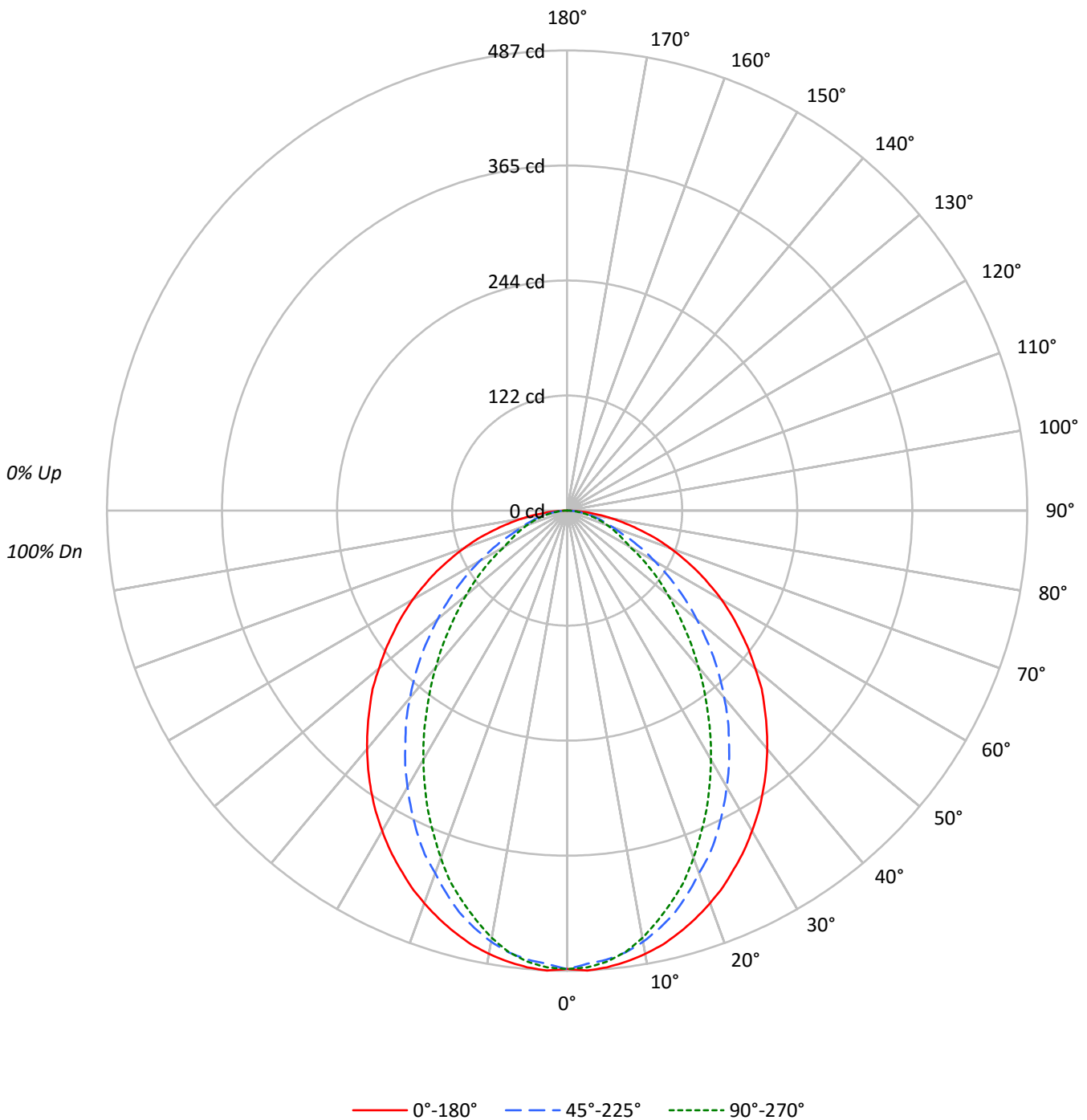
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9242	9242	9242
5°	9277	9124	9164
10°	9214	8963	8882
15°	9107	8685	8446
20°	8961	8274	7926
25°	8789	7900	7337
30°	8609	7430	6693
35°	8411	6941	6025
40°	8193	6433	5371
45°	7963	5897	4725
50°	7705	5310	4143
55°	7439	4726	3573
60°	7192	4069	2918
65°	6869	3434	2700
70°	6460	2846	2517
75°	5888	2591	2311
80°	5276	2293	2062
85°	4393	1923	1836



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	4.6
10°-20°	124.5	12.5
20°-30°	174.7	17.6
30°-40°	190.3	19.1
40°-50°	174.9	17.6
50°-60°	137.3	13.8
60°-70°	89.6	9.0
70°-80°	46.3	4.7
80°-90°	12.0	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°	344.7	34.6
0°-40°	535.0	53.8
0°-60°	847.2	85.1
0°-90°	995.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	995.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	485	483	477	481	479	46
15°	462	456	440	432	428	130
25°	418	404	376	358	349	193
35°	362	338	298	271	259	226
45°	296	265	219	187	175	228
55°	224	190	142	116	108	201
65°	152	116	76	62	60	150
75°	80	50	35	32	31	86
85°	20	10	9	8	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	485.2	485.2	485.2	485.2	485.2
2.5°	487.3	485.2	480.2	484.8	483.9
5°	485.2	482.7	477.2	480.6	479.3
7.5°	481.4	478.9	471.8	473.5	471.4
10°	476.4	473.1	463.4	461.8	459.2
12.5°	470.1	465.5	452.5	447.5	444.2
15°	461.8	456.3	440.4	431.6	428.3
17.5°	452.5	444.6	424.9	414.9	411.5
20°	442.1	432.9	408.2	397.7	391.0
22.5°	431.2	419.5	393.9	377.6	369.7
25°	418.2	403.6	375.9	357.5	349.1
27.5°	405.7	388.5	357.1	335.7	326.5
30°	391.4	372.6	337.8	313.1	304.3
32.5°	377.2	355.4	319.0	292.2	282.2
35°	361.7	337.8	298.5	270.9	259.1
37.5°	345.8	321.1	279.6	249.1	237.8
40°	329.5	301.8	258.7	226.9	216.0
42.5°	312.7	284.7	239.0	206.4	195.9
45°	295.6	265.4	218.9	187.1	175.4
47.5°	279.2	246.6	198.4	168.3	157.0
50°	260.0	227.7	179.2	148.6	139.8
52.5°	242.4	208.9	160.3	131.0	123.5
55°	224.0	190.5	142.3	115.5	107.6
57.5°	206.8	171.2	124.3	100.1	92.5
60°	188.8	152.8	106.8	84.6	76.6
62.5°	170.0	134.0	91.3	70.3	67.8
65°	152.4	115.5	76.2	62.0	59.9
67.5°	133.5	98.4	60.7	54.4	52.3
70°	116.0	81.6	51.1	46.5	45.2
72.5°	98.8	65.7	43.1	39.4	38.1
75°	80.0	49.8	35.2	32.2	31.4
77.5°	63.6	35.2	28.0	26.0	25.1
80°	48.1	25.5	20.9	19.7	18.8
82.5°	33.1	17.2	14.7	13.8	13.4
85°	20.1	9.6	8.8	8.4	8.4
87.5°	8.0	3.8	3.8	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)