

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: P242274

Luminaire Tested: **S122DR-S290D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242274
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-S290D935-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 994.7 lumens
Efficiency: N/A
Efficacy: 85.7 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

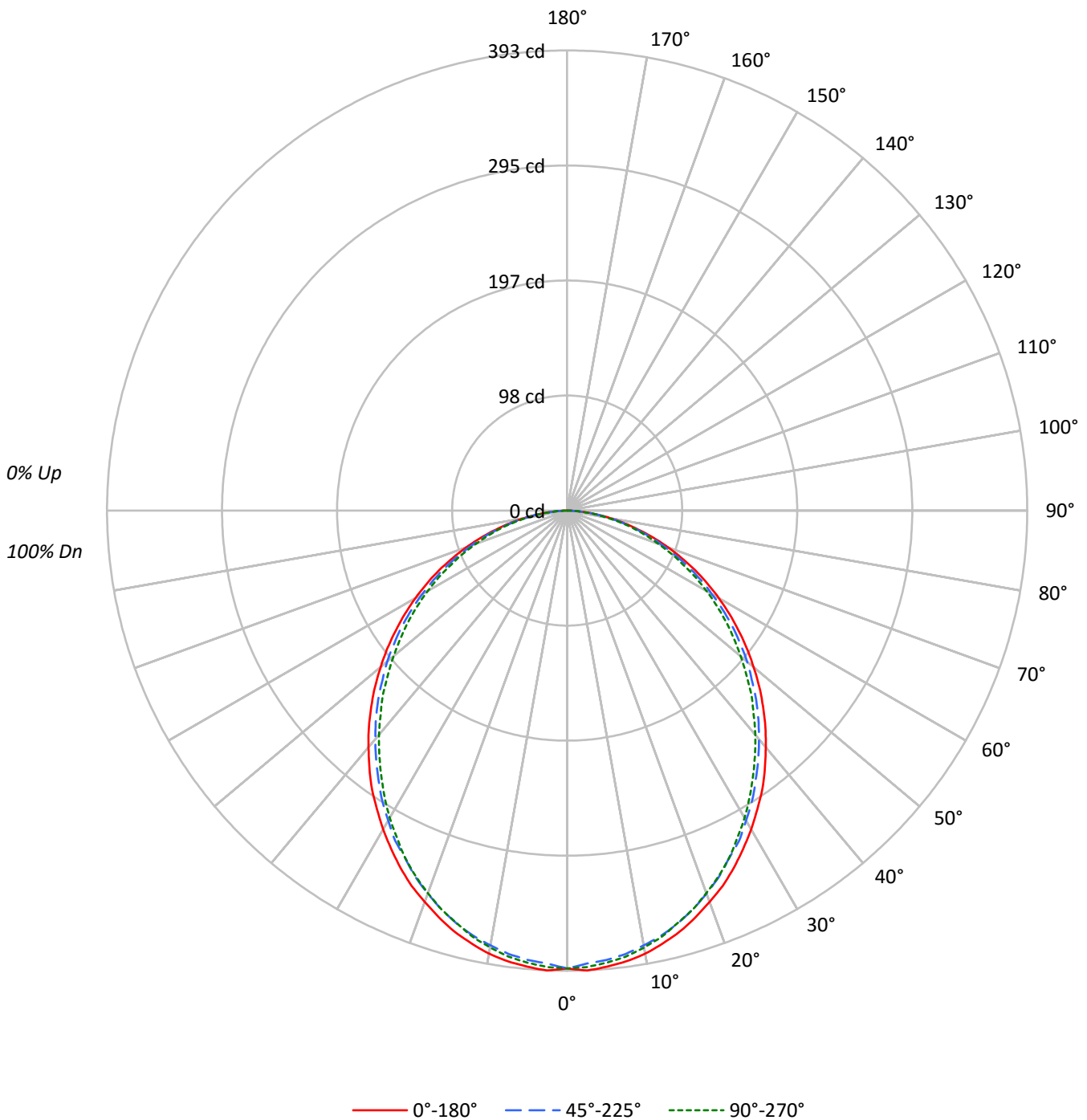
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	27	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7448	7448	7448
5°	7476	7367	7411
10°	7431	7294	7329
15°	7340	7198	7192
20°	7208	7056	7048
25°	7078	6881	6881
30°	6913	6721	6664
35°	6757	6529	6434
40°	6562	6338	6216
45°	6371	6147	5996
50°	6161	5947	5737
55°	5941	5719	5506
60°	5699	5444	5242
65°	5440	5170	4931
70°	5107	4834	4606
75°	4651	4452	4342
80°	4124	4004	3795
85°	3366	3213	2885



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	3.7
10°-20°	103.5	10.4
20°-30°	152.1	15.3
30°-40°	176.7	17.8
40°-50°	176.5	17.7
50°-60°	153.9	15.5
60°-70°	113.8	11.4
70°-80°	64.4	6.5
80°-90°	17.0	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°	292.5	29.4
0°-40°	469.2	47.2
0°-60°	799.6	80.4
0°-90°	994.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	994.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	391	391	391	391	391	
5°	391	390	385	388	388	37
15°	372	370	365	366	365	105
25°	337	334	327	328	327	155
35°	291	287	281	279	277	181
45°	236	234	228	224	223	183
55°	179	177	172	168	166	160
65°	121	118	115	111	109	119
75°	63	62	60	58	59	67
85°	15	15	15	14	13	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	391.0	391.0	391.0	391.0	391.0
2.5°	393.2	391.3	387.2	391.0	390.2
5°	391.0	389.5	385.3	388.3	387.6
7.5°	388.3	386.1	381.9	385.0	384.2
10°	384.2	381.6	377.1	380.1	378.9
12.5°	378.6	376.3	371.8	373.7	372.9
15°	372.2	369.9	365.0	366.5	364.7
17.5°	364.3	362.0	357.1	359.0	357.1
20°	355.6	353.4	348.1	349.2	347.7
22.5°	347.0	343.6	338.7	338.7	338.0
25°	336.8	333.8	327.4	328.2	327.4
27.5°	325.6	322.9	318.0	316.9	315.0
30°	314.3	311.3	305.6	304.5	303.0
32.5°	302.3	300.0	294.0	291.7	290.2
35°	290.6	286.8	280.8	278.6	276.7
37.5°	277.4	274.1	268.0	265.4	263.5
40°	263.9	260.9	254.9	251.5	250.0
42.5°	250.7	247.7	241.7	238.0	235.7
45°	236.5	233.8	228.2	224.1	222.6
47.5°	222.6	219.9	213.9	209.8	207.5
50°	207.9	206.0	200.7	195.5	193.6
52.5°	193.6	191.0	186.1	182.0	179.3
55°	178.9	176.7	172.2	167.7	165.8
57.5°	164.3	162.4	157.5	153.0	151.5
60°	149.6	148.1	142.9	138.7	137.6
62.5°	135.3	132.7	128.9	125.2	123.7
65°	120.7	118.4	114.7	111.3	109.4
67.5°	105.6	103.8	100.4	97.7	96.2
70°	91.7	90.2	86.8	84.2	82.7
72.5°	77.4	75.9	74.1	71.4	70.3
75°	63.2	62.4	60.5	58.3	59.0
77.5°	50.4	48.9	48.1	47.0	45.9
80°	37.6	37.2	36.5	35.3	34.6
82.5°	25.6	25.6	25.2	23.7	23.7
85°	15.4	15.0	14.7	13.5	13.2
87.5°	6.8	6.0	5.3	4.1	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)