

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: P242269

Luminaire Tested: **S122DR-S290D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242269
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-S290D930-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 941.9 lumens
Efficiency: N/A
Efficacy: 81.2 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

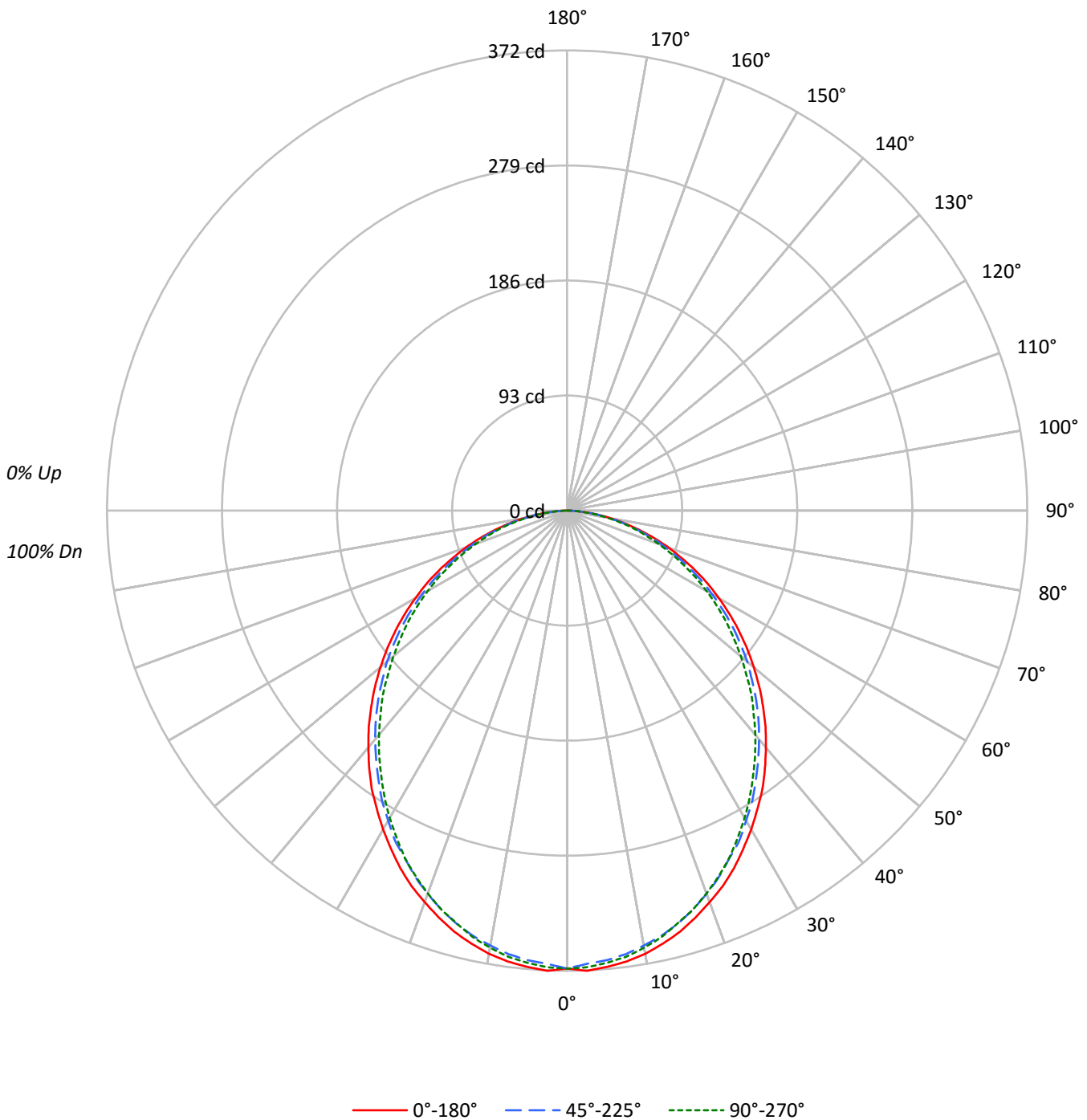
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7051	7051	7051
5°	7078	6977	7017
10°	7036	6905	6940
15°	6949	6817	6809
20°	6827	6681	6675
25°	6704	6517	6517
30°	6546	6365	6310
35°	6399	6183	6092
40°	6214	6002	5886
45°	6031	5821	5676
50°	5835	5633	5432
55°	5626	5413	5214
60°	5398	5154	4964
65°	5152	4895	4669
70°	4840	4578	4361
75°	4401	4217	4114
80°	3905	3784	3598
85°	3191	3038	2732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.8	3.7
10°-20°	98.0	10.4
20°-30°	144.1	15.3
30°-40°	167.3	17.8
40°-50°	167.1	17.7
50°-60°	145.7	15.5
60°-70°	107.7	11.4
70°-80°	60.9	6.5
80°-90°	16.1	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°	277.0	29.4
0°-40°	444.3	47.2
0°-60°	757.1	80.4
0°-90°	941.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	941.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	370	370	370	370	370	
5°	370	369	365	368	367	35
15°	352	350	346	347	345	99
25°	319	316	310	311	310	147
35°	275	272	266	264	262	172
45°	224	221	216	212	211	173
55°	169	167	163	159	157	152
65°	114	112	109	105	104	113
75°	60	59	57	55	56	64
85°	15	14	14	13	12	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	370.2	370.2	370.2	370.2	370.2
2.5°	372.4	370.6	366.7	370.2	369.5
5°	370.2	368.8	364.9	367.7	367.0
7.5°	367.7	365.6	361.7	364.5	363.8
10°	363.8	361.3	357.0	359.9	358.8
12.5°	358.5	356.3	352.1	353.8	353.1
15°	352.4	350.3	345.7	347.1	345.3
17.5°	344.9	342.8	338.2	340.0	338.2
20°	336.8	334.6	329.6	330.7	329.3
22.5°	328.6	325.4	320.7	320.7	320.0
25°	319.0	316.1	310.1	310.8	310.1
27.5°	308.3	305.8	301.2	300.1	298.3
30°	297.6	294.8	289.4	288.3	286.9
32.5°	286.2	284.1	278.4	276.2	274.8
35°	275.2	271.6	265.9	263.8	262.0
37.5°	262.7	259.5	253.8	251.3	249.5
40°	249.9	247.0	241.4	238.2	236.7
42.5°	237.4	234.6	228.9	225.3	223.2
45°	223.9	221.4	216.1	212.2	210.7
47.5°	210.7	208.2	202.6	198.6	196.5
50°	196.9	195.1	190.1	185.1	183.3
52.5°	183.3	180.8	176.2	172.3	169.8
55°	169.4	167.3	163.0	158.8	157.0
57.5°	155.6	153.8	149.2	144.9	143.5
60°	141.7	140.3	135.3	131.4	130.3
62.5°	128.2	125.7	122.1	118.5	117.1
65°	114.3	112.1	108.6	105.4	103.6
67.5°	100.0	98.3	95.0	92.6	91.1
70°	86.9	85.4	82.2	79.7	78.3
72.5°	73.3	71.9	70.1	67.6	66.6
75°	59.8	59.1	57.3	55.2	55.9
77.5°	47.7	46.3	45.6	44.5	43.4
80°	35.6	35.2	34.5	33.5	32.8
82.5°	24.2	24.2	23.9	22.4	22.4
85°	14.6	14.2	13.9	12.8	12.5
87.5°	6.4	5.7	5.0	3.9	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)