

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: P242255

Luminaire Tested: **S122DR-S290D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242255
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-S290D830-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1088.9 lumens
Efficiency: N/A
Efficacy: 93.9 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

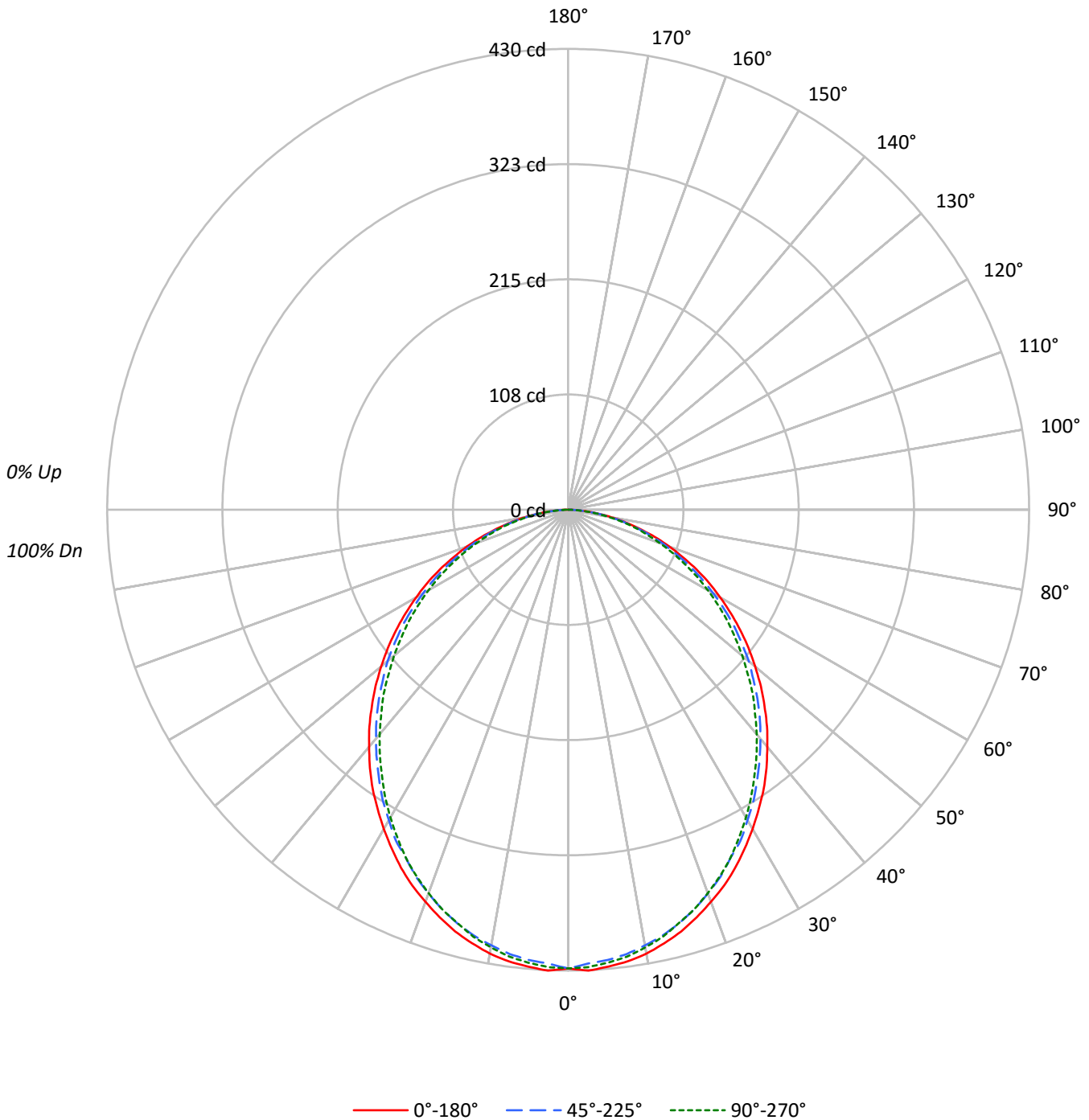
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8152	8152	8152
5°	8184	8065	8113
10°	8135	7984	8023
15°	8034	7880	7872
20°	7891	7725	7717
25°	7749	7532	7532
30°	7566	7359	7296
35°	7397	7148	7043
40°	7184	6937	6806
45°	6974	6729	6562
50°	6744	6513	6279
55°	6506	6260	6027
60°	6240	5958	5737
65°	5954	5656	5399
70°	5591	5296	5040
75°	5085	4879	4754
80°	4519	4377	4157
85°	3693	3497	3147



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.3	3.7
10°-20°	113.3	10.4
20°-30°	166.6	15.3
30°-40°	193.4	17.8
40°-50°	193.2	17.7
50°-60°	168.5	15.5
60°-70°	124.5	11.4
70°-80°	70.5	6.5
80°-90°	18.6	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°	320.2	29.4
0°-40°	513.6	47.2
0°-60°	875.3	80.4
0°-90°	1088.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1088.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	428	428	428	428	428	
5°	428	426	422	425	424	41
15°	407	405	400	401	399	115
25°	369	365	358	359	358	170
35°	318	314	307	305	303	199
45°	259	256	250	245	244	200
55°	196	193	188	184	182	175
65°	132	130	126	122	120	131
75°	69	68	66	64	65	74
85°	17	16	16	15	14	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	428.0	428.0	428.0	428.0	428.0
2.5°	430.5	428.4	423.9	428.0	427.2
5°	428.0	426.4	421.8	425.1	424.3
7.5°	425.1	422.6	418.1	421.4	420.6
10°	420.6	417.7	412.8	416.1	414.8
12.5°	414.4	411.9	407.0	409.1	408.2
15°	407.4	405.0	399.6	401.2	399.2
17.5°	398.8	396.3	391.0	393.0	391.0
20°	389.3	386.8	381.1	382.3	380.7
22.5°	379.8	376.1	370.8	370.8	370.0
25°	368.7	365.4	358.4	359.3	358.4
27.5°	356.4	353.5	348.2	346.9	344.9
30°	344.0	340.8	334.6	333.3	331.7
32.5°	330.9	328.4	321.8	319.4	317.7
35°	318.1	314.0	307.4	304.9	302.9
37.5°	303.7	300.0	293.4	290.5	288.5
40°	288.9	285.6	279.0	275.3	273.7
42.5°	274.5	271.2	264.6	260.5	258.0
45°	258.9	256.0	249.8	245.3	243.6
47.5°	243.6	240.7	234.2	229.6	227.2
50°	227.6	225.5	219.8	214.0	211.9
52.5°	211.9	209.1	203.7	199.2	196.3
55°	195.9	193.4	188.5	183.5	181.5
57.5°	179.8	177.8	172.4	167.5	165.8
60°	163.8	162.1	156.4	151.9	150.6
62.5°	148.2	145.3	141.2	137.0	135.4
65°	132.1	129.6	125.5	121.8	119.8
67.5°	115.6	113.6	109.9	107.0	105.4
70°	100.4	98.8	95.1	92.2	90.5
72.5°	84.8	83.1	81.1	78.2	77.0
75°	69.1	68.3	66.3	63.8	64.6
77.5°	55.1	53.5	52.7	51.4	50.2
80°	41.2	40.7	39.9	38.7	37.9
82.5°	28.0	28.0	27.6	25.9	25.9
85°	16.9	16.5	16.0	14.8	14.4
87.5°	7.4	6.6	5.8	4.5	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)