

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: P333840

Luminaire Tested: **S122DS-S290D940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333840
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: S122DS-S290D940-4F0-1E-UDD-F
Description: DEFINE 2 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 290 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

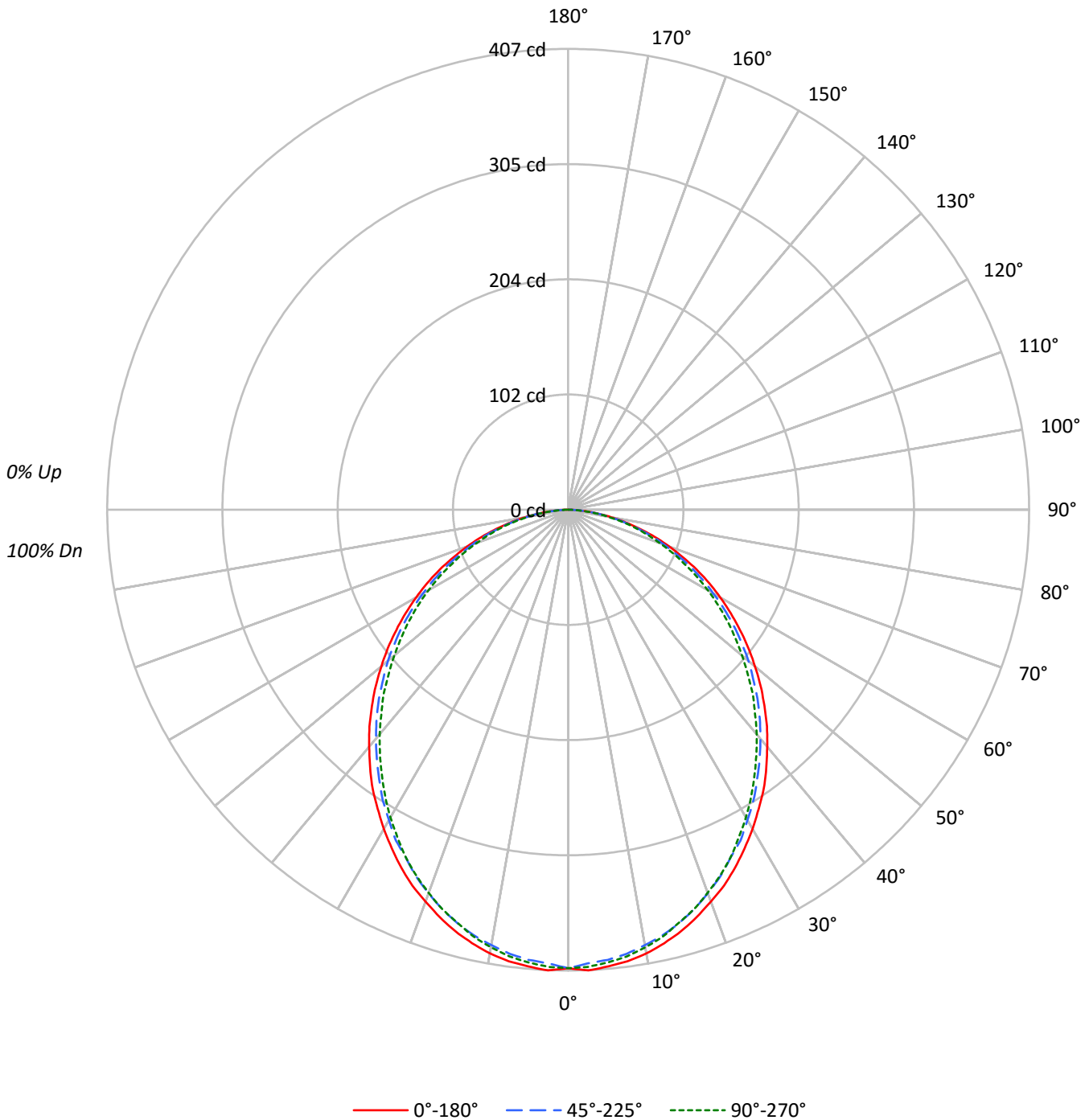
Lumens per Lamp: N/A
Luminaire Lumens: 1030.2 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (Ain): 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	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6537	6537	6537
5°	6562	6468	6506
10°	6524	6402	6435
15°	6442	6320	6313
20°	6328	6194	6187
25°	6216	6041	6041
30°	6068	5901	5850
35°	5933	5732	5649
40°	5760	5564	5457
45°	5592	5396	5263
50°	5408	5222	5036
55°	5216	5019	4833
60°	5005	4779	4602
65°	4776	4535	4329
70°	4485	4244	4046
75°	4080	3911	3812
80°	3617	3515	3329
85°	2964	2816	2519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.1	3.7
10°-20°	107.2	10.4
20°-30°	157.6	15.3
30°-40°	183.0	17.8
40°-50°	182.8	17.7
50°-60°	159.4	15.5
60°-70°	117.8	11.4
70°-80°	66.7	6.5
80°-90°	17.6	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°	302.9	29.4
0°-40°	485.9	47.2
0°-60°	828.1	80.4
0°-90°	1030.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1030.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	405	403	399	402	401	38
15°	385	383	378	380	378	109
25°	349	346	339	340	339	161
35°	301	297	291	288	287	188
45°	245	242	236	232	230	189
55°	185	183	178	174	172	166
65°	125	123	119	115	113	124
75°	65	65	63	60	61	70
85°	16	16	15	14	14	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	404.9	404.9	404.9	404.9	404.9
2.5°	407.3	405.3	401.0	404.9	404.1
5°	404.9	403.4	399.1	402.2	401.4
7.5°	402.2	399.9	395.6	398.7	397.9
10°	397.9	395.2	390.5	393.6	392.5
12.5°	392.1	389.7	385.1	387.0	386.2
15°	385.4	383.1	378.1	379.6	377.7
17.5°	377.3	374.9	369.9	371.8	369.9
20°	368.3	366.0	360.5	361.7	360.1
22.5°	359.4	355.9	350.8	350.8	350.0
25°	348.9	345.7	339.1	339.9	339.1
27.5°	337.2	334.4	329.4	328.2	326.3
30°	325.5	322.4	316.5	315.4	313.8
32.5°	313.0	310.7	304.5	302.1	300.6
35°	301.0	297.1	290.8	288.5	286.6
37.5°	287.3	283.8	277.6	274.9	272.9
40°	273.3	270.2	264.0	260.5	258.9
42.5°	259.7	256.6	250.3	246.5	244.1
45°	244.9	242.2	236.3	232.0	230.5
47.5°	230.5	227.8	221.5	217.3	214.9
50°	215.3	213.4	207.9	202.5	200.5
52.5°	200.5	197.8	192.7	188.4	185.7
55°	185.3	183.0	178.3	173.6	171.7
57.5°	170.1	168.2	163.1	158.5	156.9
60°	155.0	153.4	148.0	143.7	142.5
62.5°	140.2	137.4	133.5	129.7	128.1
65°	125.0	122.6	118.7	115.2	113.3
67.5°	109.4	107.5	104.0	101.2	99.7
70°	95.0	93.4	89.9	87.2	85.7
72.5°	80.2	78.6	76.7	74.0	72.8
75°	65.4	64.6	62.7	60.3	61.1
77.5°	52.2	50.6	49.8	48.7	47.5
80°	38.9	38.5	37.8	36.6	35.8
82.5°	26.5	26.5	26.1	24.5	24.5
85°	16.0	15.6	15.2	14.0	13.6
87.5°	7.0	6.2	5.5	4.3	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)