

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: P242279

Luminaire Tested: **S122DR-S290D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242279
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-S290D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 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 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

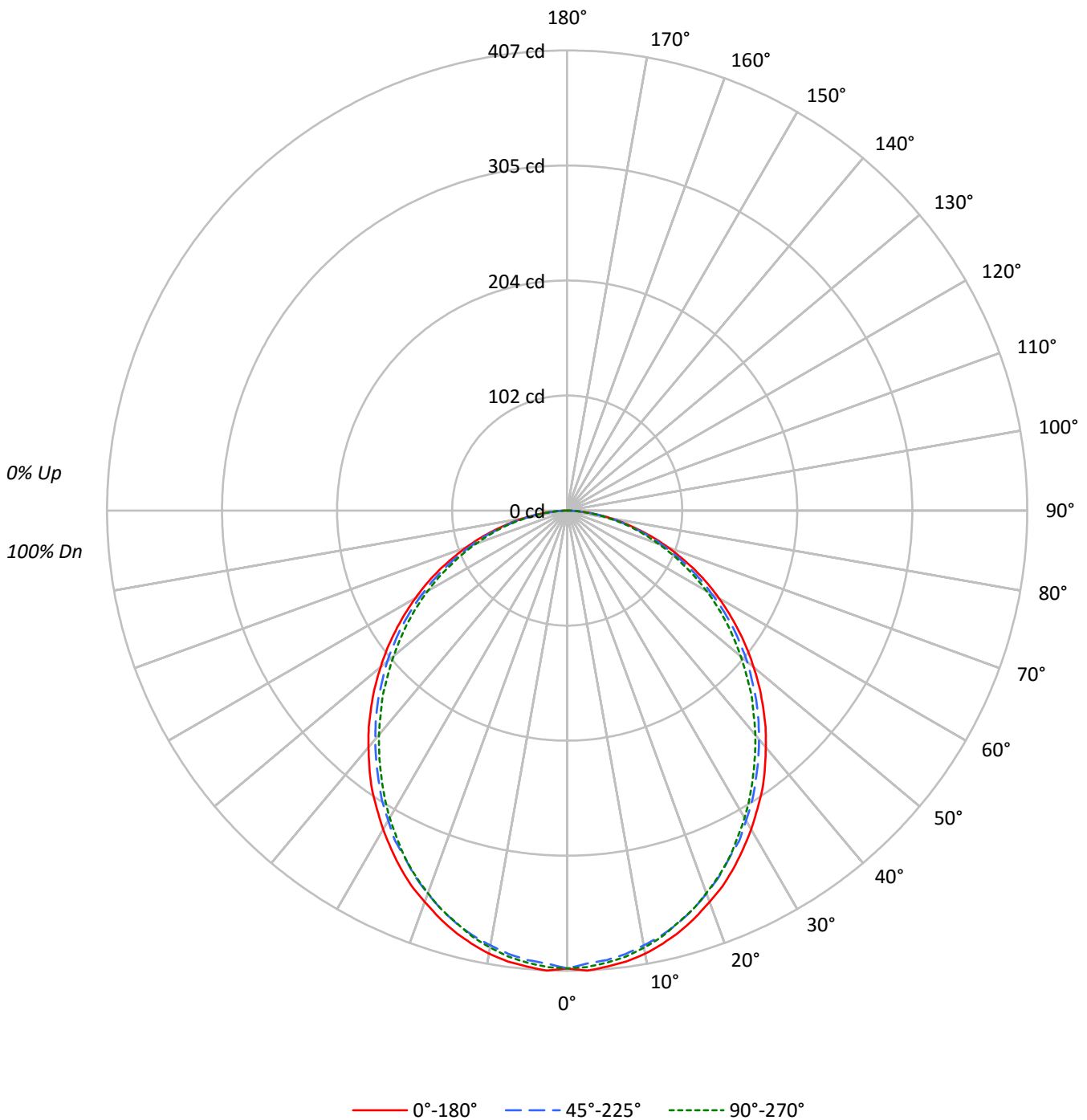
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	28		38	32	27		37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7712	7712	7712
5°	7742	7631	7675
10°	7696	7553	7592
15°	7600	7456	7448
20°	7465	7307	7299
25°	7333	7127	7127
30°	7159	6961	6902
35°	6999	6762	6664
40°	6796	6564	6438
45°	6597	6365	6209
50°	6380	6161	5941
55°	6154	5921	5702
60°	5905	5638	5429
65°	5634	5350	5107
70°	5291	5007	4773
75°	4813	4614	4497
80°	4267	4146	3927
85°	3497	3322	2972



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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)