

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: P242385

Luminaire Tested: **S122RDR-S865D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED 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: 2584.3 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

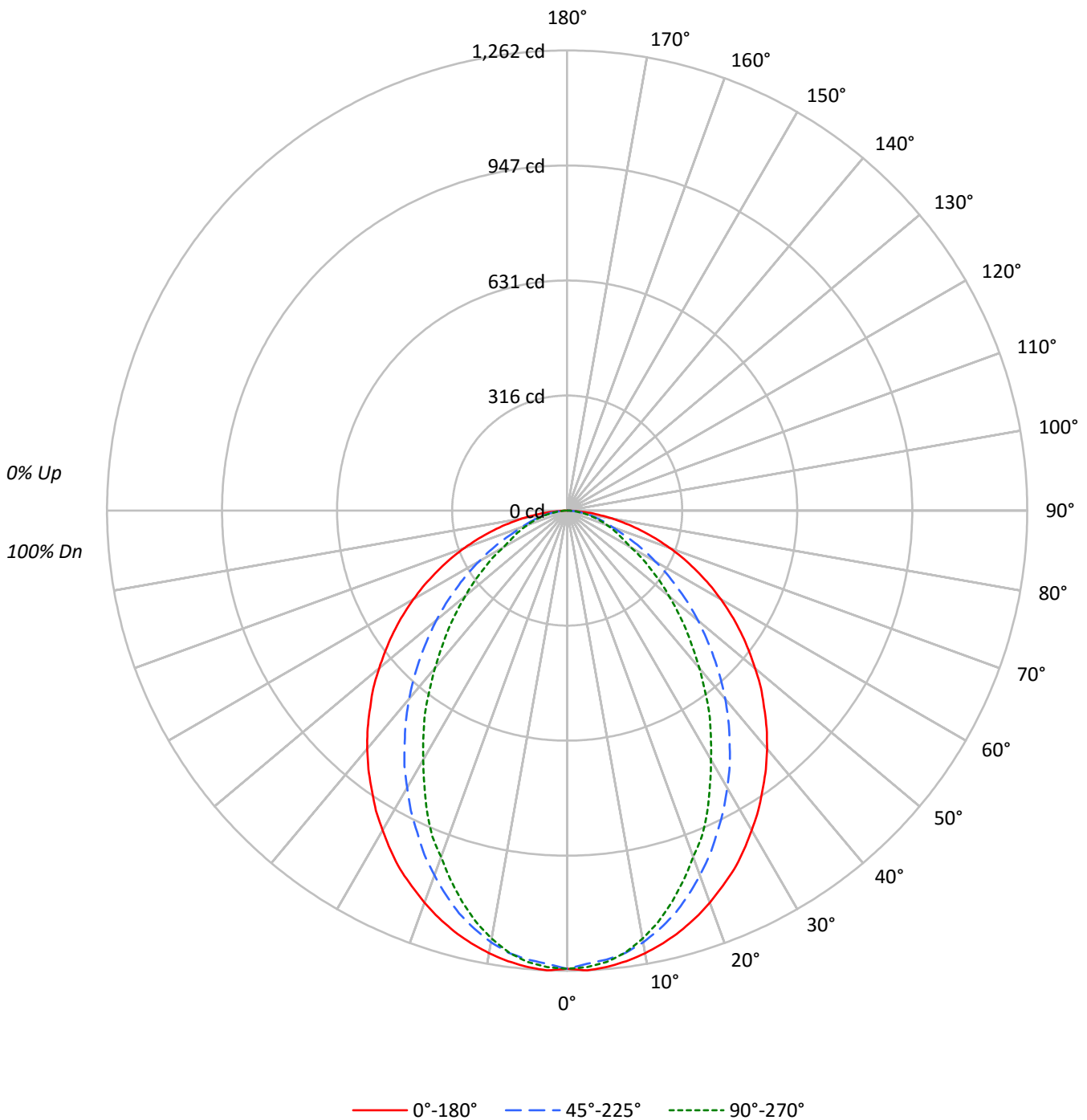
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23933	23933	23933
5°	24025	23635	23765
10°	23842	23249	23049
15°	23567	22559	21909
20°	23189	21576	20491
25°	22799	20458	19119
30°	22261	19309	17358
35°	21735	18061	15812
40°	21207	16766	14024
45°	20586	15317	12405
50°	19949	13850	10816
55°	19298	12274	9288
60°	18541	10613	7711
65°	17681	8919	7022
70°	16657	7346	6460
75°	15396	6697	6027
80°	13591	5989	5485
85°	10687	4721	4721



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	4.6
10°-20°	323.3	12.5
20°-30°	453.9	17.6
30°-40°	494.8	19.1
40°-50°	454.7	17.6
50°-60°	357.1	13.8
60°-70°	232.5	9.0
70°-80°	119.7	4.6
80°-90°	30.6	1.2
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°	895.0	34.6
0°-40°	1389.7	53.8
0°-60°	2201.6	85.2
0°-90°	2584.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2584.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1256	1251	1236	1246	1243	119
15°	1195	1183	1144	1122	1111	337
25°	1085	1048	973	927	910	499
35°	935	877	777	705	680	585
45°	764	688	569	488	460	590
55°	581	492	370	301	280	519
65°	392	300	198	159	156	389
75°	209	130	91	83	82	221
85°	49	25	22	22	22	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1256.5	1256.5	1256.5	1256.5	1256.5
2.5°	1262.2	1256.5	1244.0	1255.4	1253.1
5°	1256.5	1250.9	1236.1	1246.3	1242.9
7.5°	1246.3	1239.5	1223.6	1228.1	1222.4
10°	1232.7	1224.7	1202.0	1198.6	1191.7
12.5°	1215.6	1205.4	1174.7	1167.9	1155.3
15°	1195.1	1182.6	1144.0	1122.4	1111.0
17.5°	1171.3	1153.1	1105.3	1080.3	1062.1
20°	1144.0	1121.2	1064.4	1035.9	1010.9
22.5°	1114.4	1088.3	1022.3	983.6	966.6
25°	1084.8	1048.5	973.4	926.8	909.7
27.5°	1049.6	1010.9	927.9	874.5	848.3
30°	1012.1	968.9	877.9	819.9	789.2
32.5°	975.7	923.4	830.1	761.9	733.5
35°	934.7	876.7	776.7	705.0	680.0
37.5°	894.9	832.4	726.6	648.2	619.7
40°	852.9	784.6	674.3	593.6	564.0
42.5°	809.6	736.9	622.0	537.9	509.4
45°	764.2	688.0	568.6	487.8	460.5
47.5°	721.0	640.2	517.4	436.7	411.6
50°	673.2	592.5	467.4	388.9	365.0
52.5°	626.6	541.3	419.6	344.6	323.0
55°	581.1	492.4	369.6	301.3	279.7
57.5°	534.5	443.5	325.2	261.5	243.3
60°	486.7	395.7	278.6	220.6	202.4
62.5°	440.1	349.1	238.8	184.2	175.1
65°	392.3	300.2	197.9	159.2	155.8
67.5°	346.8	254.7	159.2	139.9	136.5
70°	299.1	210.4	131.9	120.5	116.0
72.5°	253.6	169.4	110.3	101.2	98.9
75°	209.2	129.6	91.0	83.0	81.9
77.5°	164.9	92.1	71.6	67.1	64.8
80°	123.9	66.0	54.6	50.0	50.0
82.5°	86.4	44.3	37.5	35.3	35.3
85°	48.9	25.0	21.6	21.6	21.6
87.5°	18.2	9.1	9.1	8.0	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)