

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: P242277

Luminaire Tested: **S122DR-S865D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242277
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-S865D935-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2905.2 lumens
Efficiency: N/A
Efficacy: 83.5 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

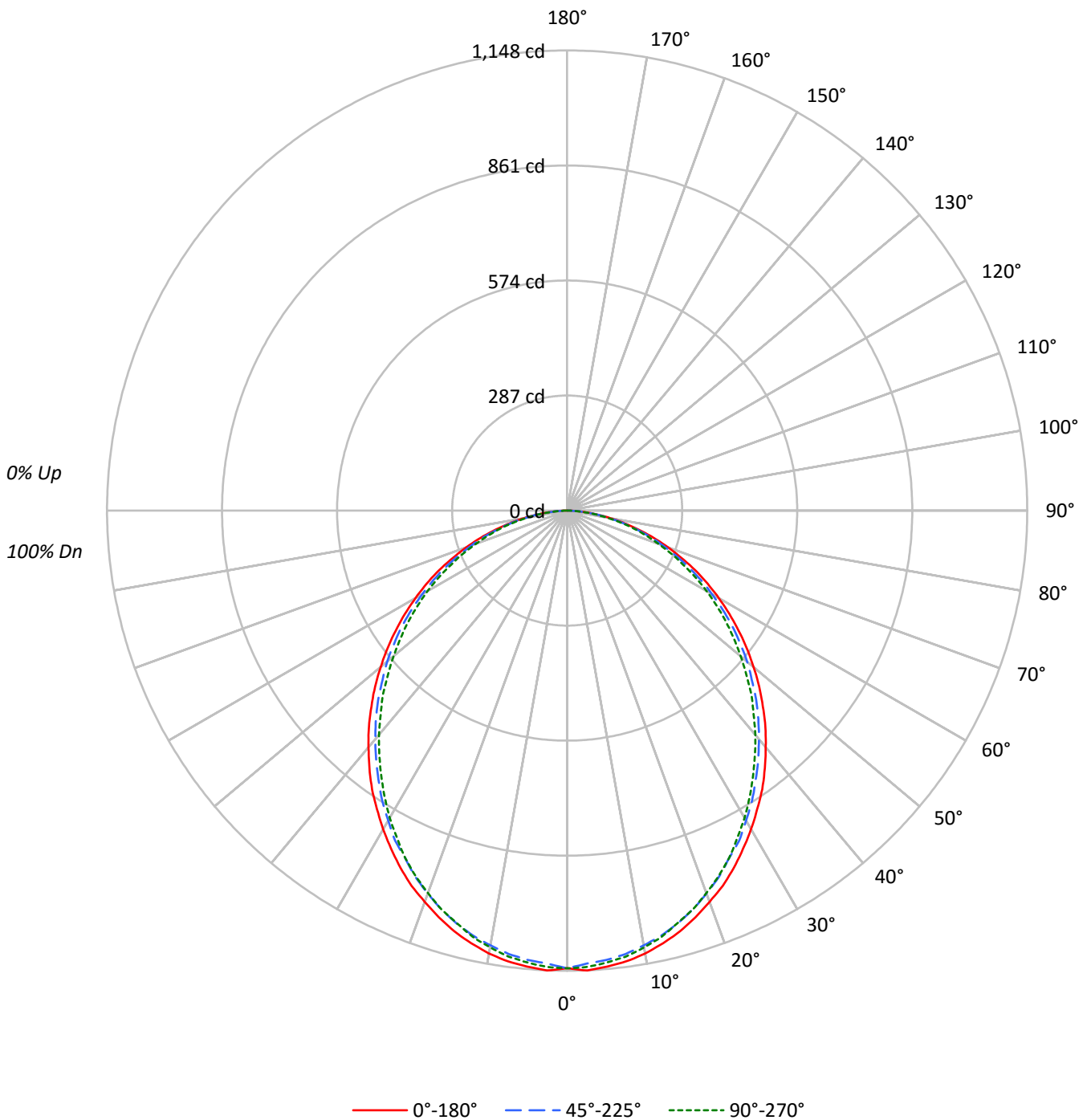
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	21751	21751	21751
5°	21834	21518	21644
10°	21703	21301	21407
15°	21435	21023	21001
20°	21055	20609	20586
25°	20676	20098	20098
30°	20189	19634	19465
35°	19735	19072	18791
40°	19166	18510	18156
45°	18603	17954	17509
50°	17993	17374	16757
55°	17355	16701	16080
60°	16648	15893	15311
65°	15887	15094	14400
70°	14920	14123	13455
75°	13578	13012	12688
80°	12044	11682	11079
85°	9835	9354	8392



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.5	3.7
10°-20°	302.4	10.4
20°-30°	444.4	15.3
30°-40°	516.1	17.8
40°-50°	515.5	17.7
50°-60°	449.5	15.5
60°-70°	332.3	11.4
70°-80°	188.0	6.5
80°-90°	49.6	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°	854.2	29.4
0°-40°	1370.4	47.2
0°-60°	2335.3	80.4
0°-90°	2905.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2905.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1142	1142	1142	1142	1142	
5°	1142	1138	1125	1134	1132	108
15°	1087	1080	1066	1070	1065	306
25°	984	975	956	958	956	453
35°	849	838	820	814	808	530
45°	691	683	666	654	650	533
55°	523	516	503	490	484	467
65°	352	346	335	325	320	349
75°	184	182	177	170	172	197
85°	45	44	43	40	38	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1141.9	1141.9	1141.9	1141.9	1141.9
2.5°	1148.5	1143.0	1130.9	1141.9	1139.7
5°	1141.9	1137.5	1125.4	1134.2	1132.0
7.5°	1134.2	1127.6	1115.6	1124.3	1122.1
10°	1122.1	1114.5	1101.3	1110.1	1106.8
12.5°	1105.7	1099.1	1085.9	1091.4	1089.2
15°	1087.0	1080.4	1066.1	1070.5	1065.0
17.5°	1064.0	1057.4	1043.1	1048.6	1043.1
20°	1038.7	1032.1	1016.7	1020.0	1015.6
22.5°	1013.4	1003.6	989.3	989.3	987.1
25°	983.8	975.0	956.3	958.5	956.3
27.5°	950.9	943.2	928.9	925.6	920.1
30°	917.9	909.1	892.7	889.4	885.0
32.5°	882.8	876.2	858.6	852.0	847.6
35°	848.7	837.8	820.2	813.6	808.1
37.5°	810.3	800.4	782.9	775.2	769.7
40°	770.8	762.0	744.4	734.6	730.2
42.5°	732.4	723.6	706.0	695.0	688.4
45°	690.6	682.9	666.5	654.4	650.0
47.5°	650.0	642.3	624.8	612.7	606.1
50°	607.2	601.7	586.3	571.0	565.5
52.5°	565.5	557.8	543.5	531.4	523.7
55°	522.6	516.1	502.9	489.7	484.2
57.5°	479.8	474.3	460.1	446.9	442.5
60°	437.0	432.6	417.2	405.2	401.9
62.5°	395.3	387.6	376.6	365.6	361.2
65°	352.5	345.9	334.9	325.0	319.5
67.5°	308.5	303.0	293.2	285.5	281.1
70°	267.9	263.5	253.6	245.9	241.6
72.5°	226.2	221.8	216.3	208.6	205.3
75°	184.5	182.3	176.8	170.2	172.4
77.5°	147.1	142.7	140.5	137.2	134.0
80°	109.8	108.7	106.5	103.2	101.0
82.5°	74.7	74.7	73.6	69.2	69.2
85°	45.0	43.9	42.8	39.5	38.4
87.5°	19.8	17.6	15.4	12.1	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)