

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: P333818

Luminaire Tested: **S122DS-S865D835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333818  
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-S865D835-4F0-1E-UDD-F  
Description: DEFINE 2 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 865 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3374.2 lumens  
Efficiency: N/A  
Efficacy: 97.0 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

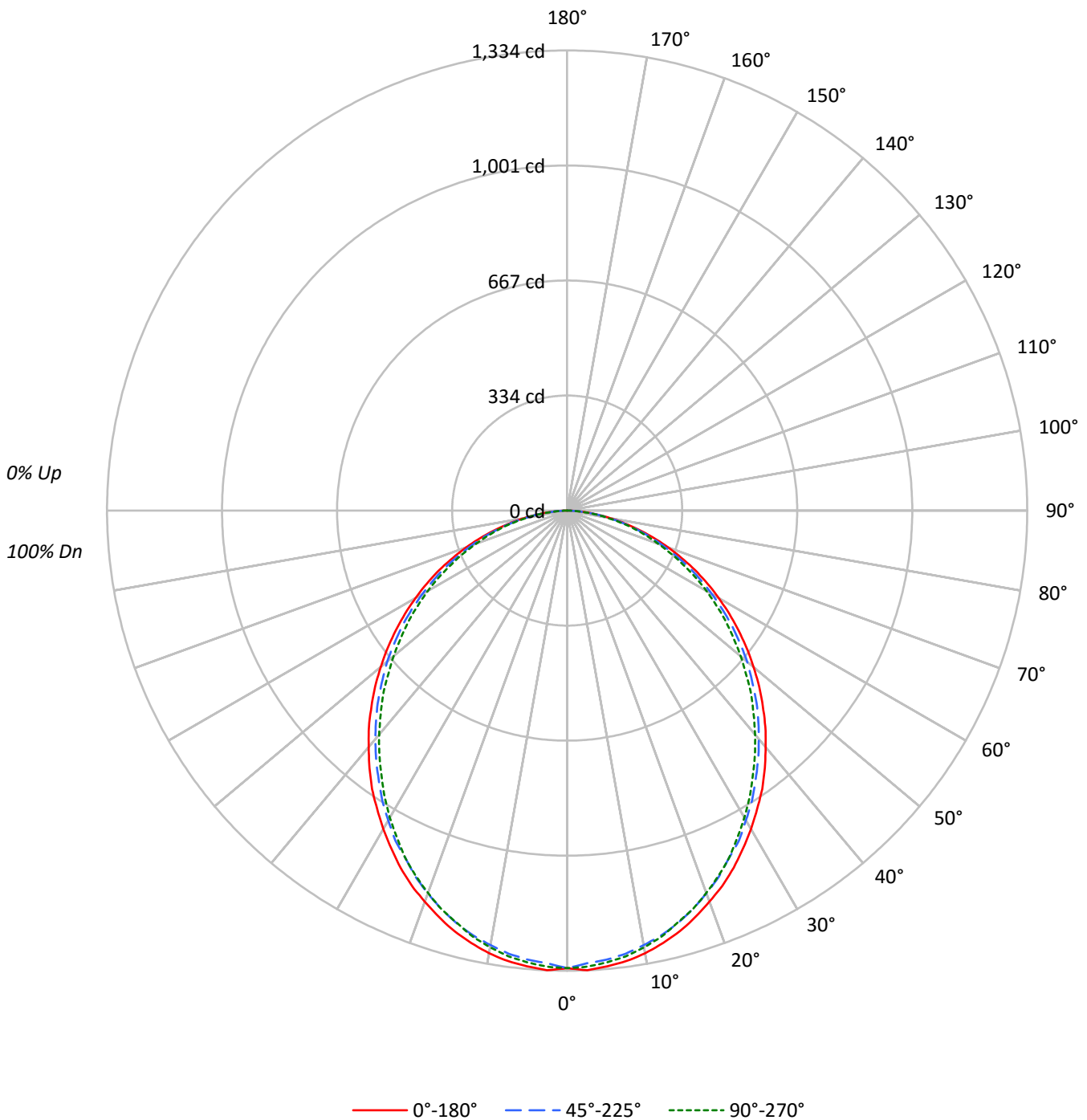
Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	21414	21414	21414
5°	21496	21185	21310
10°	21367	20971	21076
15°	21103	20699	20677
20°	20728	20290	20268
25°	20355	19787	19787
30°	19876	19330	19162
35°	19431	18776	18500
40°	18868	18223	17873
45°	18315	17676	17237
50°	17714	17106	16498
55°	17087	16442	15831
60°	16388	15649	15071
65°	15641	14861	14178
70°	14691	13907	13246
75°	13362	12807	12489
80°	11855	11502	10907
85°	9689	9207	8262



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.8	3.7
10°-20°	351.2	10.4
20°-30°	516.1	15.3
30°-40°	599.4	17.8
40°-50°	598.7	17.7
50°-60°	522.0	15.5
60°-70°	385.9	11.4
70°-80°	218.3	6.5
80°-90°	57.6	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°	992.2	29.4
0°-40°	1591.6	47.2
0°-60°	2712.3	80.4
0°-90°	3374.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3374.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1326	1326	1326	1326	1326	
5°	1326	1321	1307	1317	1315	126
15°	1262	1255	1238	1243	1237	356
25°	1143	1132	1111	1113	1111	526
35°	986	973	953	945	939	616
45°	802	793	774	760	755	619
55°	607	599	584	569	562	543
65°	409	402	389	378	371	405
75°	214	212	205	198	200	229
85°	52	51	50	46	45	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1326.3	1326.3	1326.3	1326.3	1326.3
2.5°	1333.9	1327.5	1313.5	1326.3	1323.7
5°	1326.3	1321.2	1307.1	1317.3	1314.8
7.5°	1317.3	1309.7	1295.7	1305.9	1303.3
10°	1303.3	1294.4	1279.1	1289.3	1285.5
12.5°	1284.2	1276.5	1261.2	1267.6	1265.0
15°	1262.5	1254.8	1238.3	1243.4	1237.0
17.5°	1235.7	1228.1	1211.5	1217.9	1211.5
20°	1206.4	1198.7	1180.9	1184.7	1179.6
22.5°	1177.1	1165.6	1149.0	1149.0	1146.4
25°	1142.6	1132.4	1110.7	1113.3	1110.7
27.5°	1104.4	1095.4	1078.9	1075.0	1068.7
30°	1066.1	1055.9	1036.8	1033.0	1027.8
32.5°	1025.3	1017.6	997.2	989.6	984.5
35°	985.8	973.0	952.6	945.0	938.6
37.5°	941.1	929.7	909.3	900.3	893.9
40°	895.2	885.0	864.6	853.1	848.0
42.5°	850.6	840.4	820.0	807.2	799.6
45°	802.1	793.2	774.1	760.0	754.9
47.5°	754.9	746.0	725.6	711.6	703.9
50°	705.2	698.8	681.0	663.1	656.8
52.5°	656.8	647.8	631.2	617.2	608.3
55°	607.0	599.4	584.1	568.8	562.4
57.5°	557.3	550.9	534.3	519.0	513.9
60°	507.5	502.4	484.6	470.6	466.7
62.5°	459.1	450.2	437.4	424.7	419.6
65°	409.4	401.7	389.0	377.5	371.1
67.5°	358.3	352.0	340.5	331.6	326.5
70°	311.2	306.1	294.6	285.7	280.6
72.5°	262.7	257.6	251.2	242.3	238.5
75°	214.2	211.7	205.3	197.7	200.2
77.5°	170.9	165.8	163.2	159.4	155.6
80°	127.5	126.2	123.7	119.9	117.3
82.5°	86.7	86.7	85.4	80.3	80.3
85°	52.3	51.0	49.7	45.9	44.6
87.5°	23.0	20.4	17.9	14.0	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)