

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: P334004

Luminaire Tested: **S123DS-S1165D927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334004
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DS-S1165D927-4F0-1E-UDD-F
Description: DEFINE 3 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 1165 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3553.6 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

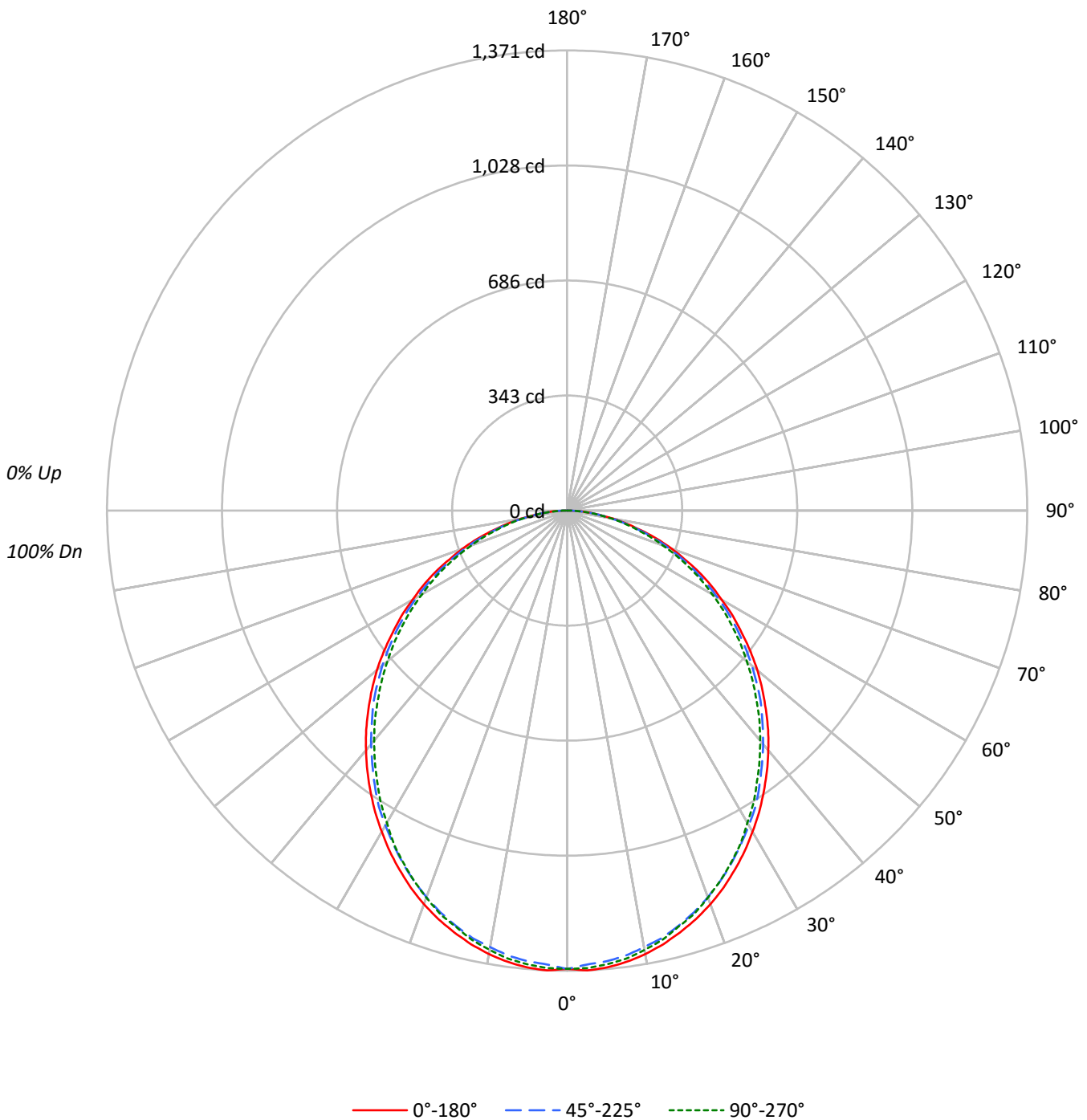
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14697	14697	14697
5°	14766	14563	14665
10°	14668	14436	14527
15°	14497	14274	14301
20°	14295	14040	14054
25°	14028	13763	13735
30°	13732	13454	13353
35°	13422	13128	12959
40°	13099	12768	12570
45°	12743	12440	12135
50°	12387	12032	11699
55°	11920	11611	11260
60°	11451	11121	10768
65°	11033	10585	10257
70°	10420	9976	9533
75°	9520	9179	8788
80°	8585	8226	8151
85°	7546	7250	6966



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.7	3.6
10°-20°	363.5	10.2
20°-30°	536.8	15.1
30°-40°	626.9	17.6
40°-50°	630.3	17.7
50°-60°	553.7	15.6
60°-70°	412.3	11.6
70°-80°	234.7	6.6
80°-90°	66.7	1.9
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°	1029.0	29.0
0°-40°	1656.0	46.6
0°-60°	2839.9	79.9
0°-90°	3553.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3553.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1367	1361	1348	1360	1357	130
15°	1301	1296	1281	1290	1283	367
25°	1181	1174	1159	1160	1156	544
35°	1021	1014	999	992	986	639
45°	837	832	817	803	797	646
55°	635	634	619	606	600	569
65°	433	427	416	406	403	427
75°	229	224	221	215	211	245
85°	61	59	59	56	56	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1365.4	1365.4	1365.4	1365.4	1365.4
2.5°	1371.3	1366.6	1353.7	1365.4	1364.3
5°	1366.6	1360.8	1347.8	1359.6	1357.2
7.5°	1356.1	1350.2	1337.3	1347.8	1346.7
10°	1342.0	1336.1	1320.8	1331.4	1329.1
12.5°	1323.2	1318.5	1304.4	1311.4	1310.3
15°	1300.9	1296.2	1280.9	1290.3	1283.3
17.5°	1276.2	1270.3	1255.1	1262.1	1259.8
20°	1248.0	1241.0	1225.7	1230.4	1226.9
22.5°	1216.3	1209.3	1194.0	1197.6	1192.9
25°	1181.1	1174.1	1158.8	1160.0	1156.5
27.5°	1144.7	1137.7	1121.2	1122.4	1118.9
30°	1104.8	1098.9	1082.5	1082.5	1074.3
32.5°	1064.9	1056.7	1044.9	1036.7	1033.2
35°	1021.4	1014.4	999.1	992.1	986.2
37.5°	978.0	968.6	953.3	945.1	941.6
40°	932.2	925.2	908.7	899.3	894.6
42.5°	886.4	878.2	861.8	852.4	847.7
45°	837.1	832.4	817.2	803.1	797.2
47.5°	789.0	781.9	767.8	753.8	749.1
50°	739.7	733.8	718.5	705.6	698.6
52.5°	688.0	684.5	668.0	657.5	650.4
55°	635.2	634.0	618.7	605.8	600.0
57.5°	585.9	581.2	569.4	557.7	550.6
60°	531.9	530.7	516.6	506.0	500.2
62.5°	483.7	480.2	466.1	455.5	452.0
65°	433.2	427.4	415.6	406.2	402.7
67.5°	379.2	374.5	365.1	356.9	352.2
70°	331.1	324.0	317.0	308.8	302.9
72.5°	280.6	275.9	267.7	260.6	258.3
75°	228.9	224.2	220.7	214.9	211.3
77.5°	183.2	180.8	176.1	171.4	171.4
80°	138.5	135.0	132.7	131.5	131.5
82.5°	95.1	95.1	95.1	92.8	91.6
85°	61.1	58.7	58.7	56.4	56.4
87.5°	30.5	27.0	25.8	24.7	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)