

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1011368

Luminaire Tested: S123DIP-B1165D365UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011368
REPORT IS A COMBINATION OF REPORTS P989494 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

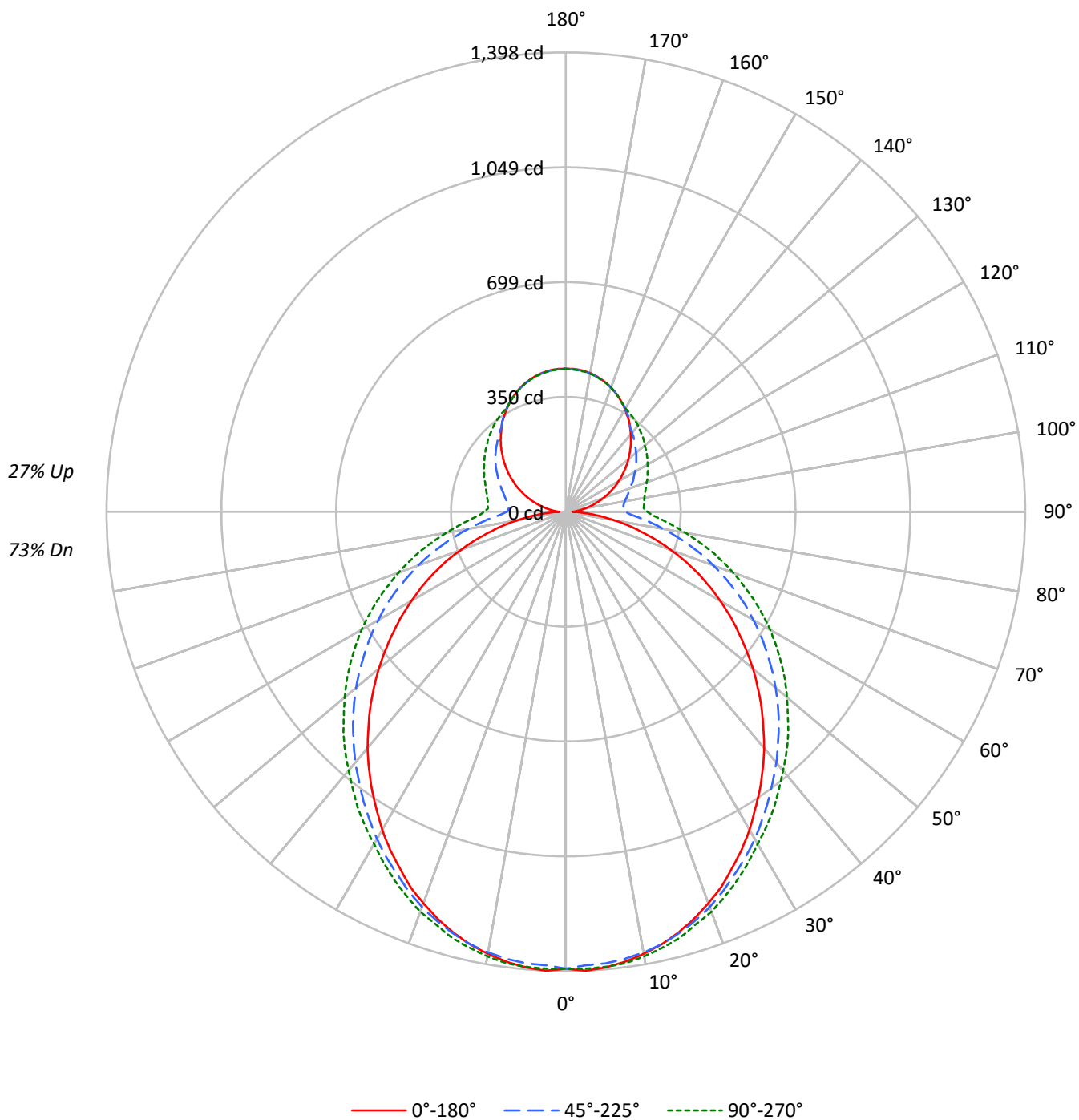
Lumens per Lamp: N/A
Luminaire Lumens: 5880.0 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
Input Voltage (V):
Input Current (Ain): 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: 24 FT

TEST NUMBER: P1011368

CATALOG NUMBER: S123DIP-B1165D365UB50-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1011368

CATALOG NUMBER: S123DIP-B1165D365UB50-4F0-XX-W2A-D1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77
1	101	96	92	87	96	91	87	83	82	79	76	74	71	69	66	64	62
2	92	83	76	70	87	79	73	67	71	66	62	64	60	56	57	54	51
3	83	73	64	58	79	69	62	56	62	56	51	56	51	47	50	46	43
4	76	64	55	49	72	61	53	47	55	49	43	50	44	40	44	40	37
5	70	57	48	42	66	54	46	40	49	42	37	44	39	34	40	35	32
6	64	51	42	36	61	49	41	35	44	38	32	40	34	30	36	31	28
7	60	46	38	32	56	44	36	31	40	33	29	36	31	27	33	28	25
8	55	42	34	28	52	40	33	27	37	30	25	33	28	24	30	26	22
9	52	38	30	25	49	37	29	24	34	27	23	31	25	21	28	23	20
10	48	35	28	23	46	34	27	22	31	25	21	28	23	19	26	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14966	14966	14966
5°	15008	14527	14515
10°	14867	14134	14026
15°	14670	13699	13507
20°	14391	13215	12949
25°	14048	12670	12372
30°	13696	12176	11792
35°	13302	11658	11319
40°	12924	11183	10819
45°	12506	10726	10409
50°	12093	10272	9962
55°	11636	9805	9551
60°	11188	9329	9130
65°	10728	8820	8638
70°	10036	8250	8130
75°	9160	7602	7606
80°	8143	6943	7009
85°	7127	6410	6581

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12506 cd/sqm

TEST NUMBER: P1011368

CATALOG NUMBER: S123DIP-B1165D365UB50-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	2.2
10°-20°	376.0	6.4
20°-30°	562.3	9.6
30°-40°	671.4	11.4
40°-50°	702.4	11.9
50°-60°	659.2	11.2
60°-70°	550.6	9.4
70°-80°	393.7	6.7
80°-90°	235.2	4.0
90°-100°	175.2	3.0
100°-110°	193.0	3.3
110°-120°	216.6	3.7
120°-130°	231.2	3.9
130°-140°	232.0	3.9
140°-150°	213.8	3.6
150°-160°	176.7	3.0
160°-170°	117.6	2.0
170°-180°	41.2	0.7
0°-30°	1070.2	18.2
0°-40°	1741.6	29.6
0°-60°	3103.2	52.8
0°-90°	4282.7	72.8
90°-120°	584.9	9.9
90°-150°	1261.8	21.5
90°-180°	1597.0	27.2
0°-180°	5880.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1392	1389	1380	1392	1390	132
15°	1325	1330	1328	1344	1342	373
25°	1197	1212	1216	1236	1236	552
35°	1030	1054	1074	1097	1103	644
45°	842	878	916	945	957	649
55°	642	692	747	788	800	575
65°	444	503	570	615	630	439
75°	241	312	388	438	456	257
85°	74	150	230	282	297	76
90°	20	98	179	232	248	16
95°	37	98	175	224	239	35
105°	89	126	194	237	251	95
115°	153	172	226	263	274	152
125°	217	218	262	292	301	194
135°	279	280	296	322	329	215
145°	336	335	336	348	353	210
155°	383	383	384	385	383	176
165°	418	416	416	418	416	118
175°	434	433	433	435	432	41
180°	435	435	435	435	435	

TEST NUMBER: P1011368

CATALOG NUMBER: S123DIP-B1165D365UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.4	1390.4	1390.4	1390.4	1390.4
2.5°	1398.0	1393.5	1381.4	1393.5	1392.0
5°	1392.0	1388.9	1379.8	1392.0	1390.4
7.5°	1381.4	1381.4	1372.3	1387.4	1385.9
10°	1366.2	1369.2	1361.7	1376.8	1373.8
12.5°	1348.0	1352.6	1348.0	1361.7	1358.6
15°	1325.3	1329.9	1328.3	1343.5	1342.0
17.5°	1298.1	1307.1	1305.6	1319.3	1316.2
20°	1267.8	1276.9	1279.9	1293.5	1295.0
22.5°	1236.0	1245.0	1249.6	1267.8	1266.2
25°	1196.6	1211.7	1216.3	1236.0	1236.0
27.5°	1158.7	1175.4	1184.5	1201.1	1202.6
30°	1117.8	1137.5	1149.6	1167.8	1167.8
32.5°	1072.4	1095.1	1111.8	1131.4	1136.0
35°	1030.0	1054.2	1073.9	1096.6	1102.7
37.5°	984.5	1011.8	1034.5	1060.3	1064.8
40°	939.1	966.3	996.6	1022.4	1028.4
42.5°	889.1	923.9	955.7	984.5	993.6
45°	842.1	878.5	916.4	945.1	957.3
47.5°	792.2	833.1	875.5	907.3	916.4
50°	743.7	786.1	833.1	867.9	878.5
52.5°	692.2	737.6	790.6	827.0	840.6
55°	642.2	692.2	746.7	787.6	799.7
57.5°	593.7	645.2	704.3	745.2	758.8
60°	542.2	596.8	658.9	701.3	717.9
62.5°	493.8	549.8	616.5	658.9	674.0
65°	443.8	502.9	569.5	614.9	630.1
67.5°	393.8	455.9	522.6	572.5	584.7
70°	340.8	405.9	478.6	527.1	542.2
72.5°	292.3	357.5	433.2	483.2	498.3
75°	240.8	312.0	387.8	437.7	455.9
77.5°	196.9	268.1	343.8	396.8	410.5
80°	150.0	224.2	302.9	354.4	369.6
82.5°	109.1	184.8	265.1	316.6	331.7
85°	74.2	150.0	230.2	281.7	296.9
87.5°	45.4	121.2	198.4	249.9	265.1
90°	20.0	97.7	179.4	232.3	248.1
92.5°	28.5	95.6	173.4	224.4	237.4
95°	36.9	98.3	175.3	223.6	238.8
97.5°	48.3	104.6	177.8	224.9	239.7
100°	60.1	110.7	182.1	227.0	242.8
102.5°	74.0	117.4	188.0	231.4	246.2
105°	89.0	126.1	194.3	236.7	251.0
107.5°	105.3	137.5	200.9	242.9	256.1
110°	120.2	148.2	209.4	250.2	261.6

TEST NUMBER: P1011368

CATALOG NUMBER: S123DIP-B1165D365UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	137.3	158.9	216.4	256.0	269.6
115°	152.9	172.0	226.0	262.6	274.4
117.5°	170.4	182.8	233.6	269.9	281.1
120°	184.9	194.5	242.8	277.3	287.2
122.5°	201.7	206.1	252.3	284.6	294.2
125°	217.2	218.2	261.5	292.0	301.2
127.5°	232.9	233.5	270.7	298.9	308.2
130°	248.6	249.9	279.1	306.6	313.3
132.5°	262.9	265.6	287.6	313.2	322.1
135°	278.9	279.5	295.8	321.7	328.6
137.5°	293.6	293.9	305.5	328.1	334.5
140°	307.5	309.2	314.2	336.5	341.7
142.5°	321.5	321.8	322.4	341.8	347.7
145°	336.3	335.4	336.5	348.2	353.0
147.5°	347.4	348.8	349.8	354.3	358.3
150°	360.7	361.4	362.1	362.1	363.1
152.5°	371.7	372.7	373.0	373.7	372.0
155°	383.3	383.3	383.6	385.0	382.6
157.5°	393.2	392.9	393.2	394.6	392.5
160°	402.5	401.8	401.8	403.5	402.1
162.5°	410.7	409.6	410.0	411.7	409.3
165°	417.5	416.5	416.5	418.5	416.1
167.5°	423.3	421.9	422.3	424.3	422.3
170°	428.1	426.7	426.7	429.1	426.7
172.5°	431.9	430.5	430.5	432.5	430.2
175°	434.3	432.9	432.9	434.9	432.5
177.5°	435.6	434.3	434.3	436.3	433.9
180°	435.3	435.3	435.3	435.3	435.3

(END OF REPORT)