

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: P1011410

Luminaire Tested: S123DIP-B1165D585UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011410
REPORT IS A COMBINATION OF REPORTS P989554 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D585UB50-4F0-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

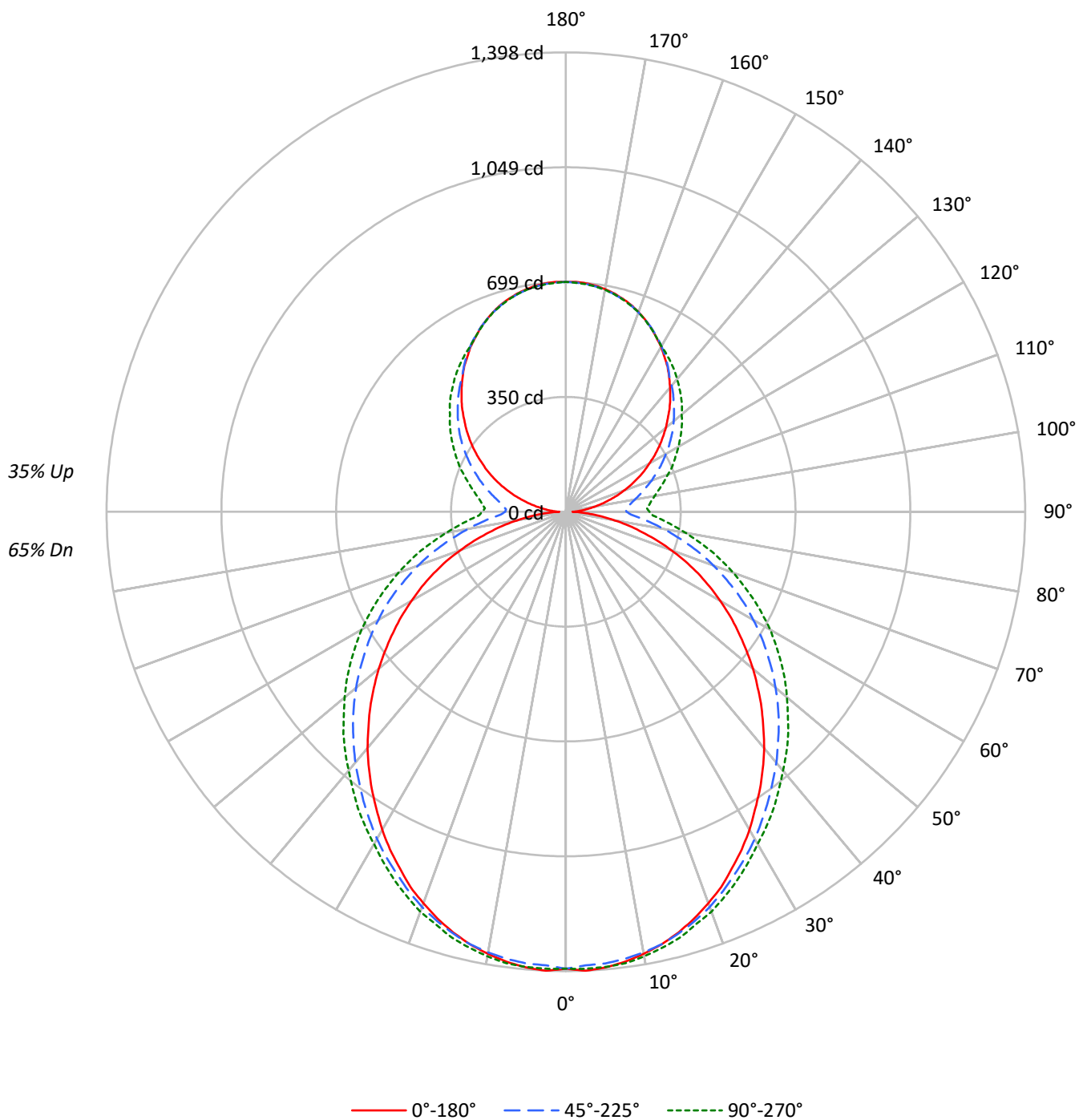
Lumens per Lamp: N/A
Luminaire Lumens: 6613.0 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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: P1011410

CATALOG NUMBER: S123DIP-B1165D585UB50-4F0-XX-W2A-D1

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70
1	100	95	90	86	93	89	85	81	78	75	72	69	66	64	59	58	56
2	90	82	75	69	84	77	71	66	68	63	59	59	56	52	52	49	46
3	82	72	64	57	77	67	60	54	59	54	49	52	48	44	45	42	39
4	75	63	55	48	70	60	52	46	53	46	41	46	41	37	40	36	33
5	69	56	47	41	64	53	45	39	47	41	36	41	36	32	36	32	29
6	63	50	42	36	59	48	40	34	42	36	31	37	32	28	33	28	25
7	59	46	37	31	55	43	35	30	38	32	27	34	29	25	30	26	22
8	54	41	33	28	51	39	32	26	35	29	24	31	26	22	27	23	20
9	51	38	30	25	47	36	29	24	32	26	22	29	23	20	25	21	18
10	47	35	27	22	44	33	26	21	30	24	20	26	21	18	23	19	16

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: P1011410

CATALOG NUMBER: S123DIP-B1165D585UB50-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	2.0
10°-20°	376.0	5.7
20°-30°	562.3	8.5
30°-40°	671.4	10.2
40°-50°	702.4	10.6
50°-60°	659.2	10.0
60°-70°	550.6	8.3
70°-80°	393.7	6.0
80°-90°	235.7	3.6
90°-100°	192.3	2.9
100°-110°	244.5	3.7
110°-120°	304.3	4.6
120°-130°	346.5	5.2
130°-140°	361.6	5.5
140°-150°	341.2	5.2
150°-160°	284.0	4.3
160°-170°	189.1	2.9
170°-180°	66.2	1.0
0°-30°	1070.2	16.2
0°-40°	1741.6	26.3
0°-60°	3103.2	46.9
0°-90°	4283.2	64.8
90°-120°	741.1	11.2
90°-150°	1790.4	27.1
90°-180°	2330.0	35.2
0°-180°	6613.0	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	100	184	238	254	17
95°	49	112	191	240	255	49
105°	136	173	243	286	300	145
115°	241	261	314	351	363	239
125°	346	348	391	420	429	309
135°	446	448	464	490	496	344
145°	540	539	541	552	556	337
155°	616	616	617	619	615	284
165°	671	669	669	673	669	189
175°	698	696	696	699	695	66
180°	700	700	700	700	700	

TEST NUMBER: P1011410

CATALOG NUMBER: S123DIP-B1165D585UB50-4F0-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°	20.2	99.9	184.4	238.1	254.3
92.5°	34.7	103.1	182.1	233.7	246.3
95°	49.1	112.0	190.7	239.8	255.0
97.5°	68.4	125.8	200.3	248.4	263.0
100°	88.3	140.1	212.6	258.1	274.3
102.5°	111.6	155.6	227.7	271.7	286.3
105°	135.8	173.3	243.3	285.7	300.4
107.5°	162.8	195.2	259.5	302.0	315.1
110°	187.7	216.1	277.7	319.3	330.3



TEST NUMBER: P1011410

CATALOG NUMBER: S123DIP-B1165D585UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.2	236.9	294.4	335.1	348.7
115°	241.2	260.9	314.4	351.3	362.8
117.5°	269.2	281.9	332.3	368.6	379.1
120°	293.5	304.3	351.6	385.9	395.4
122.5°	320.5	325.7	371.5	403.2	412.2
125°	346.3	348.0	390.9	420.5	428.9
127.5°	371.6	373.4	410.2	437.2	445.6
130°	396.9	399.8	428.5	455.1	460.3
132.5°	420.7	425.1	446.7	471.2	479.1
135°	446.5	448.3	464.5	489.5	496.0
137.5°	470.1	471.4	483.6	505.2	511.0
140°	493.4	496.1	501.3	523.4	527.2
142.5°	515.9	517.2	518.3	537.4	542.3
145°	539.5	539.1	540.8	552.3	556.2
147.5°	558.4	560.6	562.2	566.7	569.5
150°	579.8	580.9	582.0	582.0	581.7
152.5°	597.4	599.0	599.6	600.7	597.9
155°	616.1	616.1	616.6	618.8	615.0
157.5°	632.0	631.5	632.0	634.2	630.9
160°	646.9	645.8	645.8	648.5	646.3
162.5°	660.1	658.4	659.0	661.7	657.9
165°	671.0	669.4	669.4	672.7	668.8
167.5°	680.4	678.2	678.7	682.0	678.7
170°	688.1	685.9	685.9	689.7	685.9
172.5°	694.1	691.9	691.9	695.2	691.4
175°	698.0	695.8	695.8	699.1	695.2
177.5°	700.2	698.0	698.0	701.3	697.4
180°	699.6	699.6	699.6	699.6	699.6

(END OF REPORT)