

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: P1011413

Luminaire Tested: S123DIP-B1165D585UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011413
REPORT IS A COMBINATION OF REPORTS P989557 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-F1
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

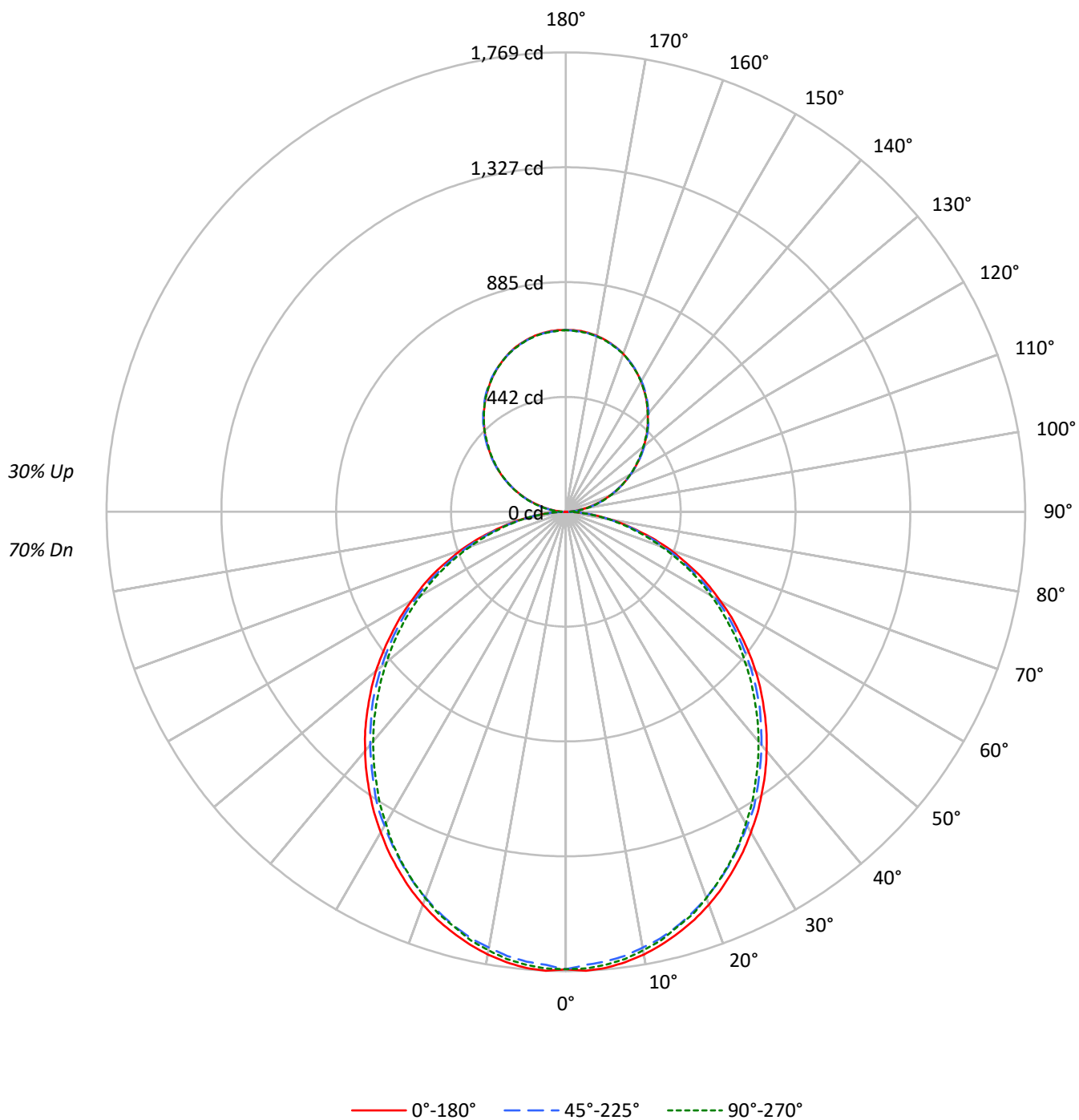
Lumens per Lamp: N/A
Luminaire Lumens: 6525.0 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1011413

CATALOG NUMBER: S123DIP-B1165D585UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1011413

CATALOG NUMBER: S123DIP-B1165D585UB50-4F0-XX-W2A-F1

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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	64	63
2	93	85	79	74	88	81	75	70	73	68	64	65	62	59	58	55	53
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	51	48	45
4	78	67	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39
5	71	59	51	45	67	57	49	43	51	45	40	46	41	37	41	37	34
6	66	53	45	39	62	51	43	38	46	40	35	42	36	32	38	33	30
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	34	30	27
8	57	44	36	30	54	42	35	29	38	32	28	35	30	26	32	27	24
9	53	40	32	27	50	39	31	26	35	29	25	32	27	23	29	25	22
10	50	37	30	25	47	35	29	24	33	27	22	30	25	21	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18963	18963	18963
5°	19010	18309	18281
10°	18841	17689	17508
15°	18579	17045	16664
20°	18278	16330	15828
25°	17890	15574	14935
30°	17464	14793	13996
35°	17020	13994	13061
40°	16554	13157	12144
45°	16041	12340	11184
50°	15518	11431	10221
55°	14849	10482	9245
60°	14159	9436	8206
65°	13513	8305	7123
70°	12581	7050	5860
75°	11237	5583	4550
80°	9702	3924	3218
85°	7569	2108	1611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16041 cd/sqm

TEST NUMBER: P1011413

CATALOG NUMBER: S123DIP-B1165D585UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	2.5
10°-20°	469.0	7.2
20°-30°	692.6	10.6
30°-40°	808.9	12.4
40°-50°	813.2	12.5
50°-60°	714.4	10.9
60°-70°	532.0	8.2
70°-80°	302.8	4.6
80°-90°	87.5	1.3
90°-100°	45.0	0.7
100°-110°	136.3	2.1
110°-120°	232.1	3.6
120°-130°	305.3	4.7
130°-140°	343.2	5.3
140°-150°	337.4	5.2
150°-160°	284.0	4.4
160°-170°	189.1	2.9
170°-180°	66.2	1.0
0°-30°	1327.7	20.3
0°-40°	2136.6	32.7
0°-60°	3664.1	56.2
0°-90°	4586.5	70.3
90°-120°	413.4	6.3
90°-150°	1399.2	21.4
90°-180°	1939.0	29.7
0°-180°	6525.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1762	1762	1762	1762	1762	
5°	1763	1756	1739	1754	1751	167
15°	1678	1672	1653	1665	1656	473
25°	1524	1515	1495	1497	1492	702
35°	1318	1309	1289	1280	1272	825
45°	1080	1074	1054	1036	1029	834
55°	820	818	798	782	774	734
65°	559	551	536	524	520	551
75°	295	289	285	277	273	316
85°	79	76	76	73	73	84
90°	0	6	13	15	16	8
95°	32	36	41	43	43	36
105°	124	125	130	130	131	132
115°	234	235	234	235	234	231
125°	342	344	342	340	338	305
135°	444	447	446	444	443	342
145°	538	539	541	540	538	336
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: P1011413

CATALOG NUMBER: S123DIP-B1165D585UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1761.7	1761.7	1761.7	1761.7	1761.7
2.5°	1769.3	1763.2	1746.6	1761.7	1760.2
5°	1763.2	1755.7	1739.0	1754.2	1751.1
7.5°	1749.6	1742.0	1725.4	1739.0	1737.5
10°	1731.4	1723.9	1704.2	1717.8	1714.8
12.5°	1707.2	1701.1	1683.0	1692.0	1690.5
15°	1678.4	1672.4	1652.7	1664.8	1655.7
17.5°	1646.6	1639.0	1619.3	1628.4	1625.4
20°	1610.2	1601.2	1581.5	1587.5	1583.0
22.5°	1569.3	1560.3	1540.6	1545.1	1539.1
25°	1523.9	1514.8	1495.1	1496.6	1492.1
27.5°	1476.9	1467.9	1446.6	1448.2	1443.6
30°	1425.4	1417.9	1396.7	1396.7	1386.1
32.5°	1373.9	1363.3	1348.2	1337.6	1333.0
35°	1317.9	1308.8	1289.1	1280.0	1272.4
37.5°	1261.8	1249.7	1230.0	1219.4	1214.9
40°	1202.8	1193.7	1172.5	1160.3	1154.3
42.5°	1143.7	1133.1	1111.9	1099.8	1093.7
45°	1080.1	1074.0	1054.3	1036.1	1028.6
47.5°	1018.0	1008.9	990.7	972.5	966.5
50°	954.3	946.8	927.1	910.4	901.3
52.5°	887.7	883.1	861.9	848.3	839.2
55°	819.5	818.0	798.3	781.6	774.1
57.5°	755.9	749.8	734.7	719.5	710.4
60°	686.2	684.7	666.5	652.9	645.3
62.5°	624.1	619.6	601.4	587.7	583.2
65°	559.0	551.4	536.2	524.1	519.6
67.5°	489.3	483.2	471.1	460.5	454.4
70°	427.2	418.1	409.0	398.4	390.8
72.5°	362.0	356.0	345.4	336.3	333.3
75°	295.4	289.3	284.8	277.2	272.7
77.5°	236.3	233.3	227.2	221.2	221.2
80°	178.7	174.2	171.2	169.7	169.7
82.5°	122.7	122.7	122.7	119.7	118.2
85°	78.8	75.7	75.7	72.7	72.7
87.5°	39.4	34.8	33.3	31.8	31.8
90°	0.5	6.0	13.2	15.4	16.5
92.5°	16.5	19.8	23.1	24.7	23.6
95°	32.4	36.3	40.7	42.9	42.9
97.5°	53.3	56.1	59.4	62.1	61.6
100°	74.7	78.0	80.8	82.4	83.5
102.5°	99.5	101.1	105.0	106.6	106.1
105°	123.7	124.8	129.7	129.7	130.8
107.5°	152.2	152.8	155.0	156.6	156.1
110°	178.6	179.7	180.8	183.0	181.9



TEST NUMBER: P1011413

CATALOG NUMBER: S123DIP-B1165D585UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.1	206.6	206.6	209.4	209.4
115°	233.6	235.2	234.1	234.7	234.1
117.5°	261.6	262.2	261.1	261.1	259.4
120°	287.4	290.7	288.0	287.4	286.3
122.5°	314.4	316.6	315.5	313.8	312.2
125°	341.8	343.5	342.4	340.2	338.0
127.5°	367.1	370.4	369.3	366.0	363.8
130°	392.4	396.8	395.2	393.0	389.1
132.5°	417.7	422.1	421.0	418.2	415.5
135°	443.5	446.8	446.3	444.1	443.0
137.5°	467.1	469.9	471.5	468.8	467.1
140°	491.9	494.6	495.2	494.6	490.8
142.5°	514.4	517.2	518.3	517.7	515.0
145°	538.0	539.1	540.8	540.2	538.0
147.5°	558.4	560.6	562.2	562.2	558.9
150°	579.8	580.9	582.0	582.0	578.7
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)