

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: P1011273

Luminaire Tested: S123DIP-B1165D1025UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011273
REPORT IS A COMBINATION OF REPORTS P989369 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1025UB40-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

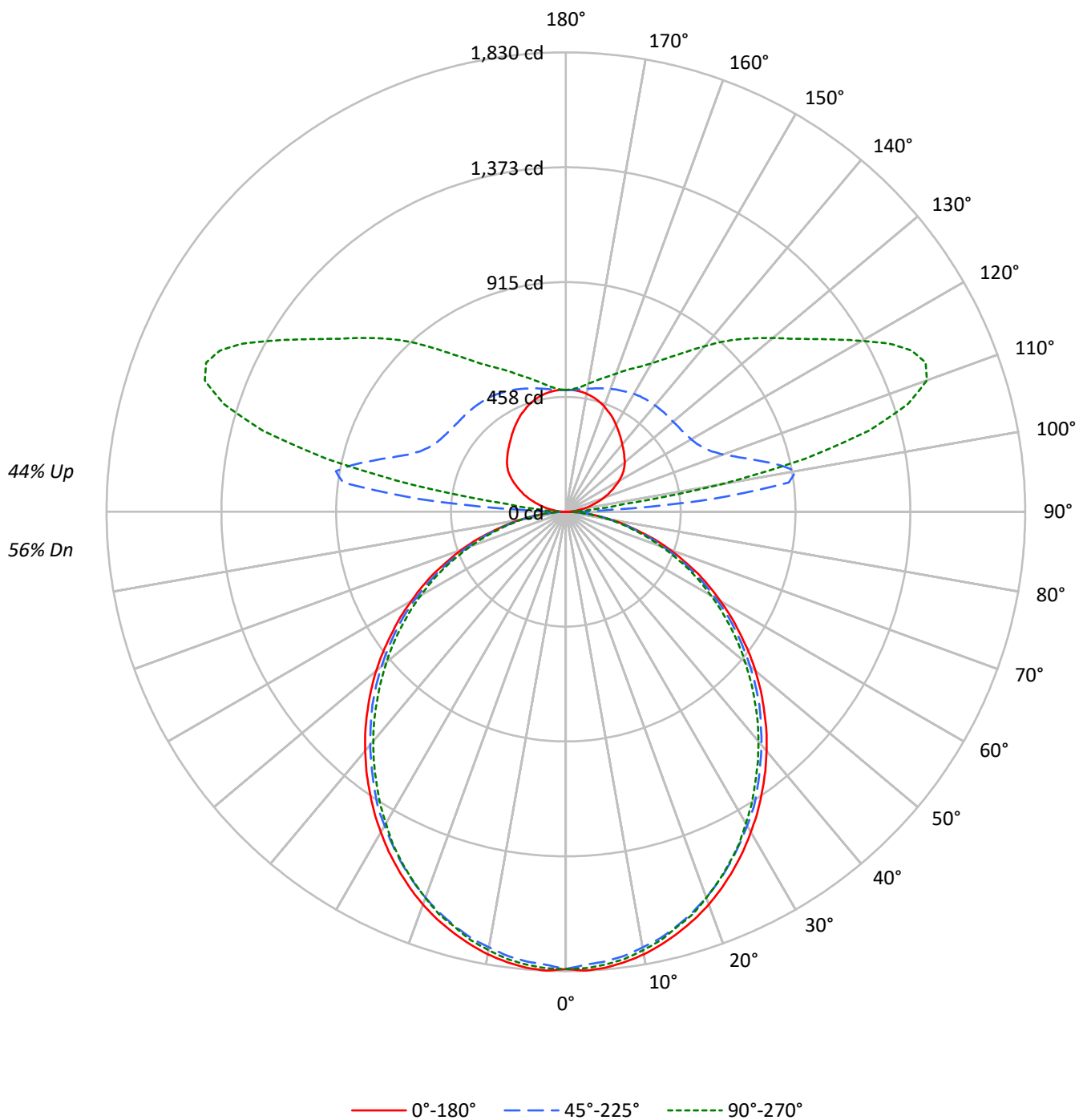
Lumens per Lamp: N/A
Luminaire Lumens: 8403.5 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 89.8
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: P1011273

CATALOG NUMBER: S123DIP-B1165D1025UB40-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1011273

CATALOG NUMBER: S123DIP-B1165D1025UB40-4F0-XX-W2A-F4

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	74	71	65	63	62	55	53	52
2	90	83	76	71	84	77	72	67	67	63	59	57	54	51	48	46	44
3	82	73	65	59	76	68	61	56	59	54	50	50	47	43	43	40	37
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	28	25
7	59	47	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	22	20
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	20	18
10	48	35	28	23	44	33	27	22	30	24	20	26	21	18	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19609	19609	19609
5°	19657	18932	18903
10°	19482	18290	18103
15°	19211	17624	17231
20°	18900	16885	16366
25°	18500	16105	15444
30°	18059	15296	14471
35°	17598	14471	13506
40°	17117	13605	12557
45°	16586	12761	11565
50°	16047	11819	10569
55°	15354	10839	9560
60°	14642	9758	8486
65°	13972	8588	7366
70°	13008	7290	6059
75°	11617	5773	4703
80°	10033	4057	3326
85°	7828	2180	1667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16586 cd/sqm

TEST NUMBER: P1011273

CATALOG NUMBER: S123DIP-B1165D1025UB40-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.7	2.0
10°-20°	484.9	5.8
20°-30°	716.2	8.5
30°-40°	836.4	10.0
40°-50°	840.9	10.0
50°-60°	738.7	8.8
60°-70°	550.1	6.5
70°-80°	313.1	3.7
80°-90°	91.7	1.1
90°-100°	275.8	3.3
100°-110°	771.0	9.2
110°-120°	751.8	8.9
120°-130°	598.6	7.1
130°-140°	472.5	5.6
140°-150°	352.5	4.2
150°-160°	246.0	2.9
160°-170°	144.5	1.7
170°-180°	47.0	0.6
0°-30°	1372.8	16.3
0°-40°	2209.3	26.3
0°-60°	3788.8	45.1
0°-90°	4743.7	56.4
90°-120°	1798.6	21.4
90°-150°	3222.4	38.3
90°-180°	3660.0	43.6
0°-180°	8403.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1823	1815	1798	1814	1811	173
15°	1736	1729	1709	1721	1712	489
25°	1576	1566	1546	1548	1543	726
35°	1363	1353	1333	1324	1316	853
45°	1117	1110	1090	1071	1064	862
55°	847	846	826	808	800	759
65°	578	570	554	542	537	570
75°	305	299	294	287	282	326
85°	82	78	78	75	75	87
90°	2	12	25	28	28	8
95°	33	109	583	170	114	35
105°	114	168	790	1382	1250	121
115°	201	251	604	1325	1520	199
125°	280	331	564	1022	1199	249
135°	328	392	556	842	972	254
145°	374	429	549	690	760	235
155°	426	459	532	604	630	196
165°	465	478	509	540	549	131
175°	484	485	488	495	494	46
180°	485	485	485	485	485	

TEST NUMBER: P1011273

CATALOG NUMBER: S123DIP-B1165D1025UB40-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1821.7	1821.7	1821.7	1821.7	1821.7
2.5°	1829.5	1823.2	1806.0	1821.7	1820.1
5°	1823.2	1815.4	1798.2	1813.8	1810.7
7.5°	1809.1	1801.3	1784.1	1798.2	1796.6
10°	1790.3	1782.5	1762.1	1776.2	1773.1
12.5°	1765.3	1759.0	1740.2	1749.6	1748.1
15°	1735.5	1729.3	1708.9	1721.4	1712.0
17.5°	1702.6	1694.8	1674.4	1683.8	1680.7
20°	1665.0	1655.6	1635.3	1641.5	1636.8
22.5°	1622.7	1613.3	1593.0	1597.7	1591.4
25°	1575.8	1566.4	1546.0	1547.6	1542.9
27.5°	1527.2	1517.8	1495.9	1497.4	1492.7
30°	1473.9	1466.1	1444.2	1444.2	1433.2
32.5°	1420.7	1409.7	1394.1	1383.1	1378.4
35°	1362.7	1353.3	1333.0	1323.6	1315.7
37.5°	1304.8	1292.2	1271.9	1260.9	1256.2
40°	1243.7	1234.3	1212.4	1199.8	1193.6
42.5°	1182.6	1171.6	1149.7	1137.2	1130.9
45°	1116.8	1110.5	1090.2	1071.4	1063.6
47.5°	1052.6	1043.2	1024.4	1005.6	999.3
50°	986.8	979.0	958.6	941.4	932.0
52.5°	917.9	913.2	891.3	877.2	867.8
55°	847.4	845.8	825.5	808.2	800.4
57.5°	781.6	775.3	759.7	744.0	734.6
60°	709.6	708.0	689.2	675.1	667.3
62.5°	645.3	640.6	621.8	607.7	603.0
65°	578.0	570.2	554.5	542.0	537.3
67.5°	505.9	499.7	487.1	476.2	469.9
70°	441.7	432.3	422.9	412.0	404.1
72.5°	374.4	368.1	357.1	347.7	344.6
75°	305.4	299.2	294.5	286.6	281.9
77.5°	244.4	241.2	235.0	228.7	228.7
80°	184.8	180.1	177.0	175.4	175.4
82.5°	126.9	126.9	126.9	123.7	122.2
85°	81.5	78.3	78.3	75.2	75.2
87.5°	40.7	36.0	34.5	32.9	32.9
90°	2.0	11.8	24.6	27.5	28.5
92.5°	14.7	59.0	182.8	62.4	52.1
95°	33.4	108.6	582.7	170.0	114.0
97.5°	53.1	124.3	896.1	427.4	233.9
100°	72.7	137.0	930.5	894.2	616.1
102.5°	93.3	151.8	866.7	1197.3	975.7
105°	114.0	168.5	790.0	1381.6	1249.9
107.5°	135.6	188.2	722.2	1462.6	1428.7
110°	159.2	208.4	666.2	1465.1	1530.9

TEST NUMBER: P1011273

CATALOG NUMBER: S123DIP-B1165D1025UB40-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.8	229.4	628.9	1409.6	1551.5
115°	201.4	251.0	604.3	1325.0	1520.1
117.5°	222.1	271.7	587.6	1234.6	1451.3
120°	243.7	292.3	576.8	1149.2	1360.9
122.5°	262.4	312.0	569.9	1081.9	1276.4
125°	280.0	330.6	564.0	1021.9	1198.8
127.5°	293.8	348.4	561.1	972.8	1132.0
130°	306.6	364.0	558.1	927.6	1076.9
132.5°	316.4	378.3	557.1	885.4	1022.9
135°	328.2	391.6	556.2	841.6	971.8
137.5°	339.0	402.4	554.2	800.3	917.8
140°	349.8	412.2	553.2	760.0	860.8
142.5°	361.6	421.0	551.2	723.2	807.7
145°	374.4	428.9	549.3	690.2	759.6
147.5°	387.1	437.2	546.3	664.8	718.3
150°	399.9	444.2	542.4	642.2	682.9
152.5°	412.7	451.6	537.5	622.5	653.4
155°	425.5	458.9	531.6	604.3	629.9
157.5°	435.3	465.3	526.7	586.6	607.3
160°	447.1	470.7	520.8	570.4	585.6
162.5°	455.9	474.6	514.9	555.2	566.0
165°	464.8	478.0	509.0	540.0	549.3
167.5°	471.7	481.0	503.1	526.7	532.6
170°	477.6	482.4	497.2	514.9	517.8
172.5°	481.5	483.9	492.3	504.6	504.1
175°	484.4	484.9	488.4	495.2	494.3
177.5°	486.4	485.4	485.4	489.3	487.4
180°	485.4	485.4	485.4	485.4	485.4

(END OF REPORT)