

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: P1011451

Luminaire Tested: S123DIP-B1165D805UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011451
REPORT IS A COMBINATION OF REPORTS P989613 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB50-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

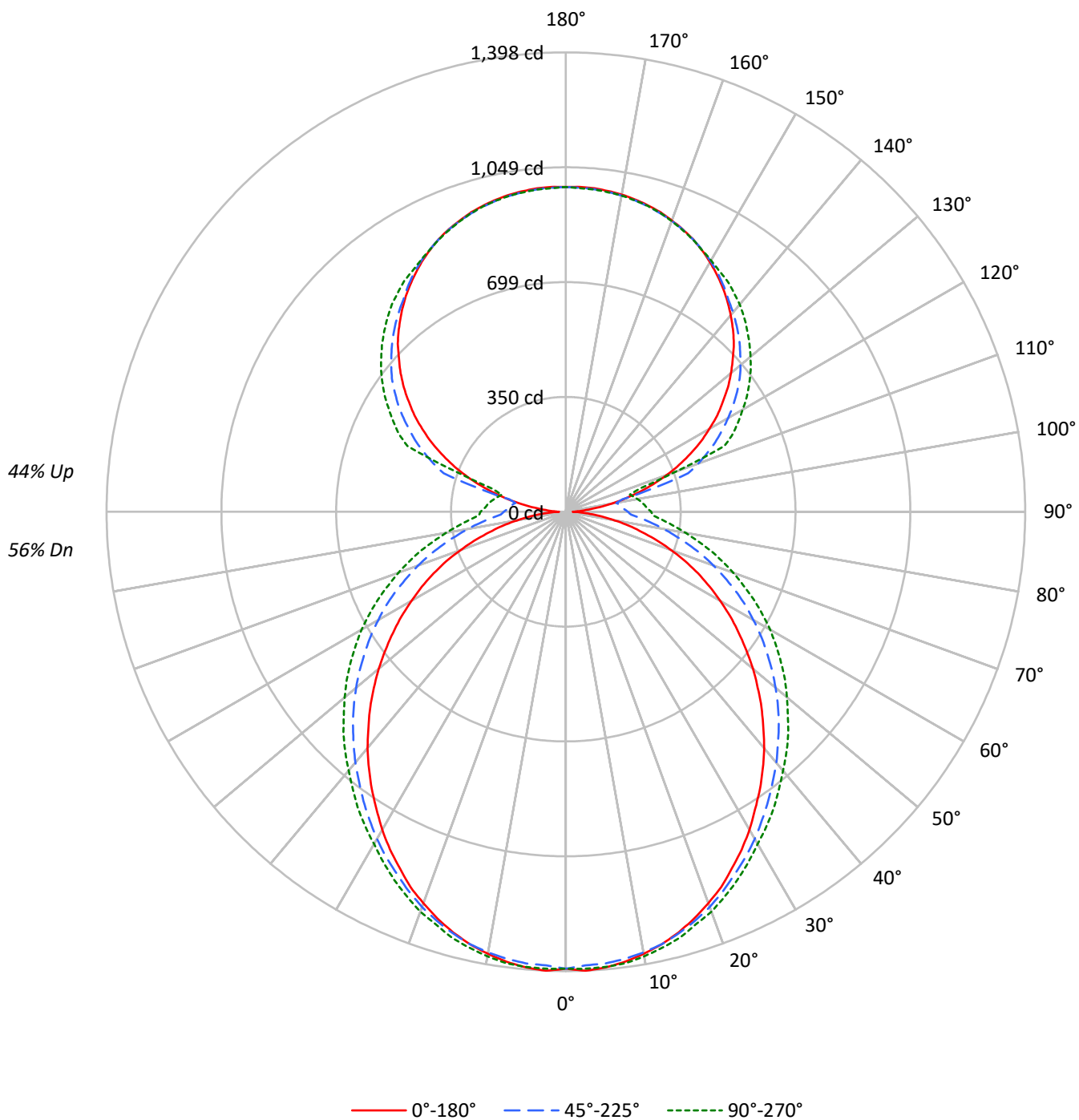
Lumens per Lamp: N/A
Luminaire Lumens: 7688.0 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 82.4
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: P1011451

CATALOG NUMBER: S123DIP-B1165D805UB50-4F0-XX-W2A-D

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	109	109	109	109	101	101	101	101	87	87	87	73	73	73	61	61	61
1	98	93	89	85	91	86	83	79	74	71	69	63	61	59	52	51	49
2	89	81	74	68	82	75	69	64	64	60	56	54	51	48	45	43	41
3	81	70	63	56	74	66	59	53	56	51	47	48	44	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	47	40	62	52	44	38	44	38	34	38	33	29	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	29	26	29	25	22
7	57	45	36	31	53	42	34	29	36	30	26	31	26	23	26	22	20
8	53	40	32	27	49	38	31	26	33	27	23	28	24	20	24	20	17
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	18	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

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: P1011451

CATALOG NUMBER: S123DIP-B1165D805UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.7
10°-20°	376.0	4.9
20°-30°	562.3	7.3
30°-40°	671.4	8.7
40°-50°	702.4	9.1
50°-60°	659.2	8.6
60°-70°	550.6	7.2
70°-80°	393.7	5.1
80°-90°	236.2	3.1
90°-100°	182.1	2.4
100°-110°	276.7	3.6
110°-120°	485.2	6.3
120°-130°	565.4	7.4
130°-140°	578.5	7.5
140°-150°	527.5	6.9
150°-160°	422.4	5.5
160°-170°	272.6	3.5
170°-180°	93.9	1.2
0°-30°	1070.2	13.9
0°-40°	1741.6	22.7
0°-60°	3103.2	40.4
0°-90°	4283.7	55.7
90°-120°	943.9	12.3
90°-150°	2615.3	34.0
90°-180°	3404.0	44.3
0°-180°	7688.0	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	102	189	243	260	17
95°	62	90	173	225	240	66
105°	231	275	274	187	202	244
115°	418	441	502	545	560	413
125°	583	589	636	669	681	522
135°	723	726	746	775	781	557
145°	833	836	838	851	858	521
155°	916	914	915	919	914	422
165°	966	963	963	968	963	273
175°	988	985	985	990	985	94
180°	988	988	988	988	988	

TEST NUMBER: P1011451

CATALOG NUMBER: S123DIP-B1165D805UB50-4F0-XX-W2A-D

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°	20.4	102.0	188.8	243.3	259.8
92.5°	35.1	95.8	178.1	233.2	247.7
95°	61.5	90.4	172.8	224.8	240.0
97.5°	96.6	130.6	164.4	215.7	231.5
100°	137.7	200.9	156.0	205.8	221.6
102.5°	184.7	236.6	177.0	195.2	211.8
105°	230.9	275.4	274.4	186.8	201.9
107.5°	278.6	317.0	390.1	318.0	235.4
110°	326.3	359.5	428.1	443.2	350.3



TEST NUMBER: P1011451

CATALOG NUMBER: S123DIP-B1165D805UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	373.3	399.6	465.2	509.7	521.9
115°	418.1	440.6	501.8	545.4	560.5
117.5°	463.6	480.8	536.0	578.2	591.1
120°	503.9	518.0	570.3	611.0	621.6
122.5°	546.5	554.7	604.5	641.6	652.9
125°	583.1	589.0	635.9	669.2	681.3
127.5°	621.3	625.7	667.2	699.7	708.9
130°	656.5	660.9	694.1	725.9	733.5
132.5°	688.8	694.7	719.6	749.8	758.2
135°	723.3	726.2	745.9	775.3	780.7
137.5°	752.7	757.1	769.1	797.1	803.1
140°	780.6	785.0	791.8	817.4	823.5
142.5°	807.7	810.6	812.8	834.7	840.1
145°	832.7	836.3	837.8	851.4	857.5
147.5°	855.4	859.1	860.6	866.5	869.0
150°	877.5	879.7	881.1	882.6	883.4
152.5°	897.3	898.0	898.8	901.7	898.0
155°	915.6	914.2	914.9	918.6	914.2
157.5°	930.3	930.3	929.6	934.0	928.1
160°	943.5	942.8	942.1	946.5	941.3
162.5°	956.0	953.8	953.1	958.2	953.8
165°	965.6	963.4	962.6	968.5	963.4
167.5°	973.7	970.7	970.7	976.6	970.7
170°	980.3	977.3	977.3	983.2	977.3
172.5°	984.7	981.0	981.7	987.6	981.0
175°	988.3	984.7	985.4	990.5	984.7
177.5°	989.8	986.1	986.9	992.7	985.4
180°	988.3	988.3	988.3	988.3	988.3

(END OF REPORT)