

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: P1011324

Luminaire Tested: S123DIP-B1165D1195UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011324
REPORT IS A COMBINATION OF REPORTS P989435 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1195UB50-4F0-XX-W2A-D4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

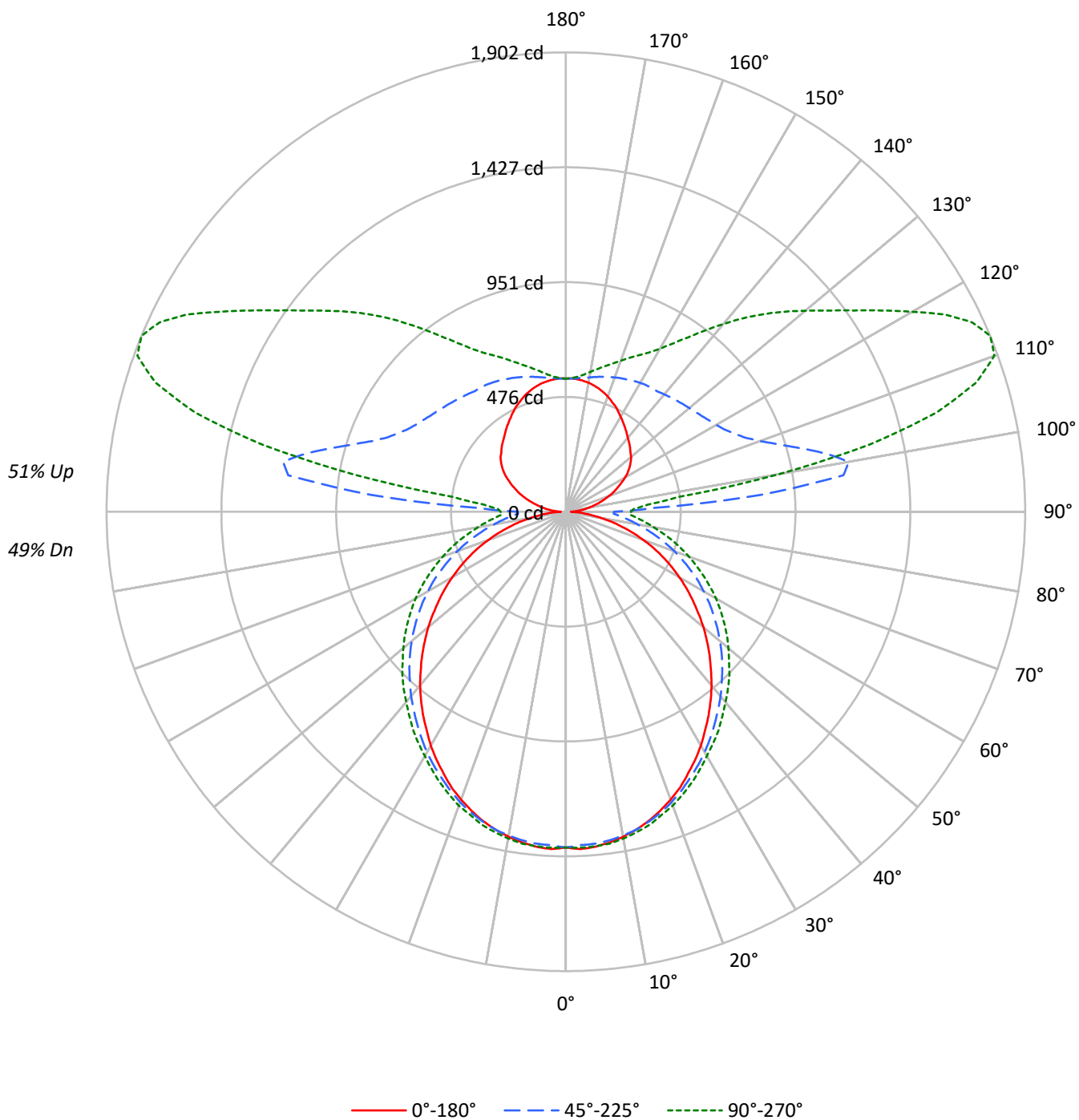
Lumens per Lamp: N/A
Luminaire Lumens: 8834.6 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 96.3
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

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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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	96	92	87	84	88	84	81	77	71	68	66	58	56	55	47	45	44
2	87	79	73	67	80	73	67	63	61	57	54	51	47	45	41	38	36
3	79	70	62	56	73	64	57	52	54	49	45	44	41	37	36	33	31
4	73	61	53	47	66	57	49	44	48	42	38	39	35	32	32	29	26
5	66	54	46	40	61	50	43	37	42	37	32	35	31	27	28	25	23
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	22	20
7	56	44	36	30	52	41	33	28	35	29	25	29	24	21	23	20	17
8	52	40	32	26	48	37	30	25	31	26	22	26	22	19	21	18	16
9	49	36	29	24	45	34	27	22	29	23	19	24	20	17	20	16	14
10	46	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	13

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.5
10°-20°	376.0	4.3
20°-30°	562.3	6.4
30°-40°	671.4	7.6
40°-50°	702.4	8.0
50°-60°	659.2	7.5
60°-70°	550.6	6.2
70°-80°	393.7	4.5
80°-90°	237.4	2.7
90°-100°	460.6	5.2
100°-110°	984.3	11.1
110°-120°	926.5	10.5
120°-130°	721.4	8.2
130°-140°	555.4	6.3
140°-150°	404.5	4.6
150°-160°	279.5	3.2
160°-170°	164.2	1.9
170°-180°	53.4	0.6
0°-30°	1070.2	12.1
0°-40°	1741.6	19.7
0°-60°	3103.2	35.1
0°-90°	4284.8	48.5
90°-120°	2371.4	26.8
90°-150°	4052.7	45.9
90°-180°	4550.0	51.5
0°-180°	8834.6	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°	22	107	199	254	270	17
95°	55	199	812	390	342	53
105°	142	240	1011	1726	1590	150
115°	236	311	767	1622	1856	235
125°	323	380	689	1242	1453	287
135°	376	446	650	1002	1157	290
145°	427	487	624	796	881	267
155°	484	521	604	687	716	222
165°	528	543	578	614	624	149
175°	550	551	555	563	562	52
180°	552	552	552	552	552	

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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°	21.9	107.3	199.1	254.0	270.2
92.5°	34.9	150.2	366.7	279.9	281.9
95°	54.7	199.0	812.1	390.1	341.6
97.5°	75.4	210.9	1159.2	672.0	467.1
100°	96.2	217.8	1189.2	1191.8	890.9
102.5°	118.2	227.0	1107.5	1525.6	1288.9
105°	141.6	240.0	1011.3	1725.8	1589.8
107.5°	164.7	256.2	925.2	1807.4	1782.4
110°	190.0	273.1	853.9	1801.0	1888.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	214.5	291.0	802.4	1727.4	1902.3
115°	236.5	311.0	767.0	1622.2	1856.0
117.5°	259.9	328.4	738.9	1510.4	1768.8
120°	283.0	345.8	719.0	1404.3	1655.5
122.5°	304.2	363.6	703.6	1318.7	1550.4
125°	322.7	380.2	689.4	1241.5	1453.1
127.5°	338.3	398.8	678.4	1176.6	1368.0
130°	352.9	416.6	667.5	1116.1	1294.9
132.5°	362.5	432.9	658.8	1059.0	1225.9
135°	375.9	446.4	650.2	1001.7	1157.3
137.5°	388.2	458.8	641.8	945.8	1086.7
140°	399.0	469.8	634.7	892.4	1014.5
142.5°	412.4	478.4	626.4	841.5	945.1
145°	426.9	487.4	624.1	796.5	881.3
147.5°	439.9	496.8	620.8	759.8	826.8
150°	454.4	504.6	616.3	729.6	779.0
152.5°	468.9	513.0	610.7	707.3	742.5
155°	483.5	521.4	604.0	686.7	715.7
157.5°	494.6	528.6	598.5	666.6	690.0
160°	508.0	534.8	591.8	648.2	665.5
162.5°	518.1	539.3	585.1	630.8	643.1
165°	528.1	543.2	578.4	613.5	624.1
167.5°	535.9	546.6	571.7	598.4	605.2
170°	542.6	548.2	565.0	585.0	588.4
172.5°	547.1	549.9	559.4	573.3	572.8
175°	550.5	551.0	554.9	562.7	561.6
177.5°	552.7	551.6	551.6	556.0	553.8
180°	551.6	551.6	551.6	551.6	551.6

(END OF REPORT)