

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: P1011280

Luminaire Tested: S123DIP-B1165D1025UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011280
REPORT IS A COMBINATION OF REPORTS P989376 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1025UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

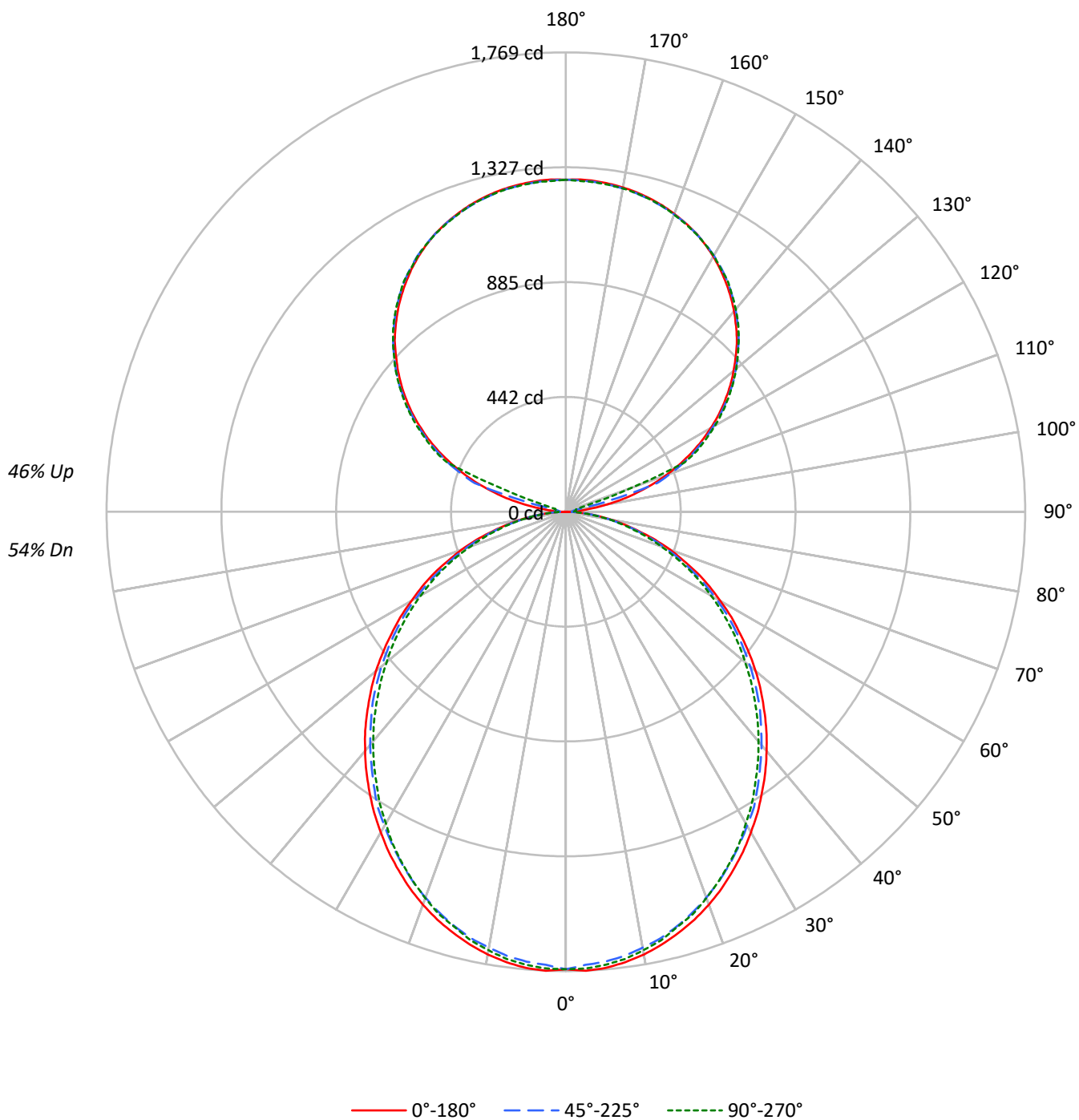
Lumens per Lamp: N/A
Luminaire Lumens: 8486.0 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60
1	99	94	90	87	91	88	84	81	75	72	70	63	62	60	53	52	50
2	90	82	76	71	83	77	71	66	66	62	58	56	53	50	46	44	42
3	82	72	65	59	76	67	61	56	58	53	49	49	45	42	41	38	36
4	75	64	56	50	69	60	53	47	51	46	42	44	40	36	37	34	31
5	69	57	49	43	64	53	46	40	46	40	36	39	35	31	33	30	27
6	63	51	43	37	59	48	40	35	41	36	31	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	27	24	21
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	25	22	19
9	51	38	31	26	47	36	29	24	31	26	22	27	23	20	23	20	17
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	2.0
10°-20°	469.0	5.5
20°-30°	692.6	8.2
30°-40°	808.9	9.5
40°-50°	813.2	9.6
50°-60°	714.4	8.4
60°-70°	532.0	6.3
70°-80°	302.8	3.6
80°-90°	88.6	1.0
90°-100°	45.1	0.5
100°-110°	218.0	2.6
110°-120°	534.3	6.3
120°-130°	678.2	8.0
130°-140°	724.6	8.5
140°-150°	677.5	8.0
150°-160°	546.5	6.4
160°-170°	352.7	4.2
170°-180°	121.5	1.4
0°-30°	1327.7	15.6
0°-40°	2136.6	25.2
0°-60°	3664.1	43.2
0°-90°	4587.6	54.1
90°-120°	797.4	9.4
90°-150°	2877.8	33.9
90°-180°	3898.0	45.9
0°-180°	8486.0	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°	1	10	23	27	28	9
95°	58	19	30	36	36	69
105°	283	294	208	40	42	300
115°	531	537	545	555	559	524
125°	749	756	760	762	764	669
135°	932	938	942	944	942	718
145°	1076	1082	1084	1086	1086	673
155°	1185	1183	1184	1188	1183	546
165°	1249	1246	1246	1253	1246	353
175°	1279	1274	1275	1282	1274	122
180°	1279	1279	1279	1279	1279	

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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°	1.0	10.5	22.8	26.6	28.5
92.5°	21.9	16.2	24.7	31.4	32.3
95°	58.0	19.0	29.5	36.1	36.1
97.5°	105.5	78.9	30.4	38.0	39.0
100°	160.6	179.6	31.4	39.0	39.9
102.5°	223.3	235.6	70.3	39.0	40.9
105°	283.1	293.6	208.1	39.9	41.8
107.5°	346.8	355.3	369.6	223.3	98.8
110°	410.4	418.0	428.5	397.1	261.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	471.2	477.9	488.3	496.9	495.0
115°	531.1	536.8	545.3	554.8	558.6
117.5°	590.0	596.6	601.4	609.0	609.9
120°	644.1	652.7	655.5	663.1	663.1
122.5°	699.2	705.9	709.7	714.4	715.4
125°	748.6	756.2	760.0	761.9	763.8
127.5°	798.0	805.6	810.4	813.2	811.3
130°	843.6	851.2	855.0	858.8	856.9
132.5°	887.4	895.0	897.8	901.6	898.8
135°	932.0	937.7	941.5	944.4	941.5
137.5°	970.0	977.6	979.5	984.3	982.4
140°	1008.0	1013.7	1016.6	1020.4	1018.5
142.5°	1043.2	1048.9	1051.7	1054.6	1051.7
145°	1075.5	1082.1	1084.0	1085.9	1085.9
147.5°	1106.8	1111.6	1113.5	1115.4	1110.6
150°	1135.3	1138.2	1140.1	1142.0	1139.1
152.5°	1161.0	1161.9	1162.9	1166.7	1161.9
155°	1184.7	1182.8	1183.8	1188.5	1182.8
157.5°	1203.7	1203.7	1202.8	1208.5	1200.9
160°	1220.8	1219.9	1218.9	1224.6	1218.0
162.5°	1237.0	1234.1	1233.2	1239.8	1234.1
165°	1249.3	1246.5	1245.5	1253.1	1246.5
167.5°	1259.8	1256.0	1256.0	1263.6	1256.0
170°	1268.3	1264.5	1264.5	1272.1	1264.5
172.5°	1274.0	1269.3	1270.2	1277.8	1269.3
175°	1278.8	1274.0	1275.0	1281.6	1274.0
177.5°	1280.7	1275.9	1276.9	1284.5	1275.0
180°	1278.8	1278.8	1278.8	1278.8	1278.8

(END OF REPORT)