

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: P1011271

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011271
REPORT IS A COMBINATION OF REPORTS P989367 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-F
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

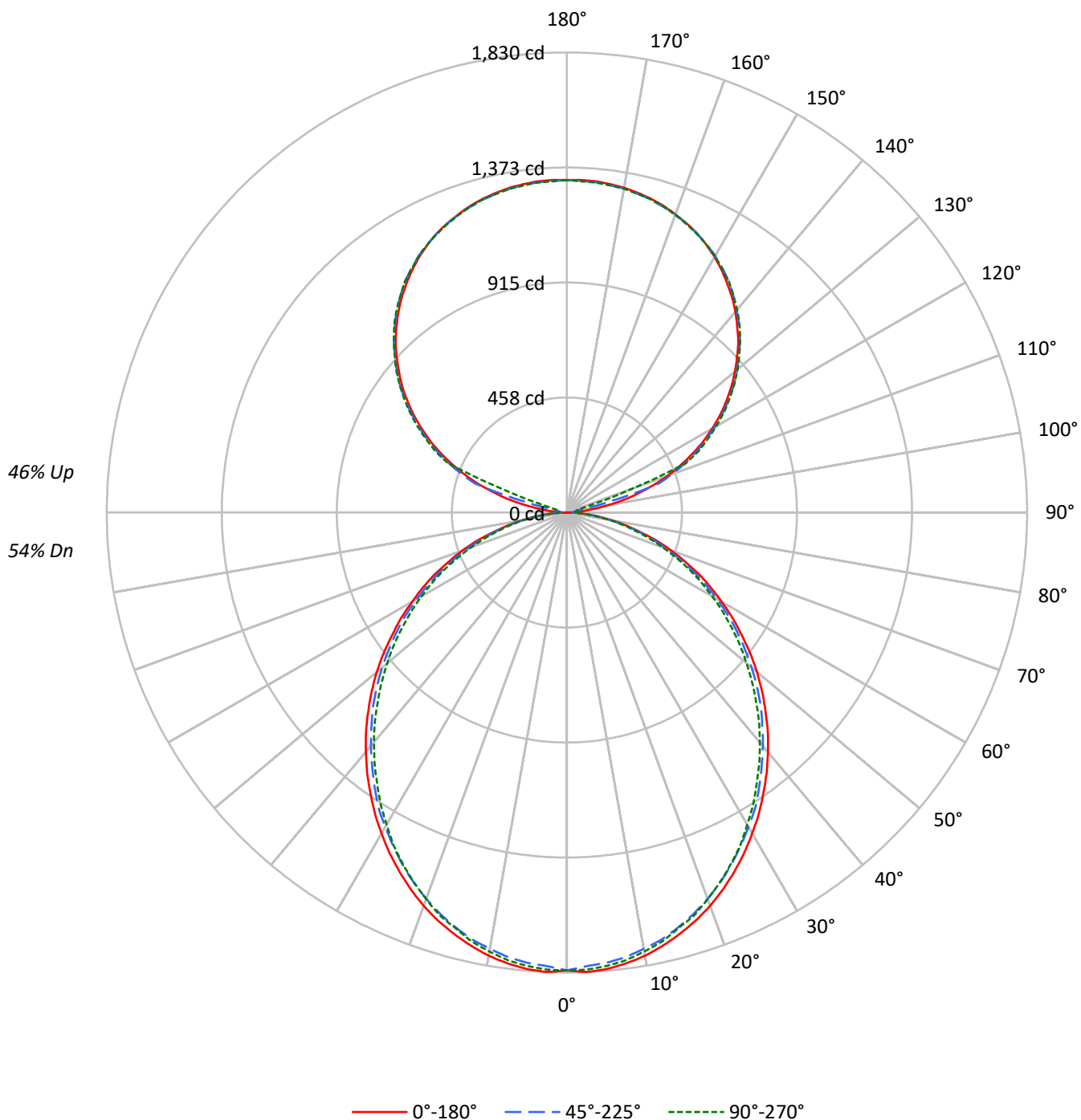
Lumens per Lamp: N/A
Luminaire Lumens: 8775.0 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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
RCR																	
0	108	108	108	108	100	100	100	100	86	86	86		72	72	72		60
1	99	94	90	87	91	88	84	81	75	72	70		63	62	60		53
2	90	82	76	71	83	77	71	66	66	62	58		56	53	50		46
3	82	72	65	59	76	67	61	56	58	53	49		49	45	42		41
4	75	64	56	50	69	60	53	47	51	46	42		44	40	36		37
5	69	57	49	43	64	53	46	40	46	40	36		39	35	31		33
6	63	51	43	37	59	48	40	35	41	36	31		36	31	28		30
7	59	46	38	33	54	43	36	31	38	32	28		32	28	24		27
8	54	42	34	29	50	39	32	27	34	29	25		30	25	22		25
9	51	38	31	26	47	36	29	24	31	26	22		27	23	20		23
10	47	35	28	23	44	33	26	22	29	24	20		25	21	18		22

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.7	2.0
10°-20°	484.9	5.5
20°-30°	716.2	8.2
30°-40°	836.4	9.5
40°-50°	840.9	9.6
50°-60°	738.7	8.4
60°-70°	550.1	6.3
70°-80°	313.1	3.6
80°-90°	91.6	1.0
90°-100°	46.6	0.5
100°-110°	225.5	2.6
110°-120°	552.5	6.3
120°-130°	701.4	8.0
130°-140°	749.3	8.5
140°-150°	700.6	8.0
150°-160°	565.1	6.4
160°-170°	364.7	4.2
170°-180°	125.7	1.4
0°-30°	1372.8	15.6
0°-40°	2209.3	25.2
0°-60°	3788.8	43.2
0°-90°	4743.6	54.1
90°-120°	824.6	9.4
90°-150°	2975.8	33.9
90°-180°	4031.0	45.9
0°-180°	8775.0	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°	1	11	24	28	30	9
95°	60	20	30	37	37	72
105°	293	304	215	41	43	310
115°	549	555	564	574	578	542
125°	774	782	786	788	790	692
135°	964	970	974	977	974	742
145°	1112	1119	1121	1123	1123	696
155°	1225	1223	1224	1229	1223	564
165°	1292	1289	1288	1296	1289	365
175°	1322	1318	1318	1325	1318	126
180°	1322	1322	1322	1322	1322	

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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°	1.0	10.8	23.6	27.5	29.5
92.5°	22.6	16.7	25.5	32.4	33.4
95°	59.9	19.6	30.5	37.3	37.3
97.5°	109.1	81.5	31.4	39.3	40.3
100°	166.0	185.7	32.4	40.3	41.3
102.5°	230.9	243.6	72.7	40.3	42.2
105°	292.8	303.6	215.2	41.3	43.2
107.5°	358.6	367.4	382.2	230.9	102.2
110°	424.4	432.3	443.1	410.7	270.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	487.3	494.2	505.0	513.8	511.9
115°	549.2	555.1	563.9	573.7	577.7
117.5°	610.1	617.0	621.9	629.7	630.7
120°	666.1	674.9	677.9	685.7	685.7
122.5°	723.1	730.0	733.9	738.8	739.8
125°	774.2	782.0	786.0	787.9	789.9
127.5°	825.3	833.1	838.0	841.0	839.0
130°	872.4	880.3	884.2	888.1	886.2
132.5°	917.6	925.5	928.4	932.3	929.4
135°	963.8	969.7	973.6	976.6	973.6
137.5°	1003.1	1010.9	1012.9	1017.8	1015.8
140°	1042.4	1048.3	1051.2	1055.1	1053.2
142.5°	1078.7	1084.6	1087.6	1090.5	1087.6
145°	1112.1	1119.0	1121.0	1122.9	1122.9
147.5°	1144.5	1149.5	1151.4	1153.4	1148.5
150°	1174.0	1177.0	1178.9	1180.9	1178.0
152.5°	1200.5	1201.5	1202.5	1206.4	1201.5
155°	1225.1	1223.1	1224.1	1229.0	1223.1
157.5°	1244.8	1244.8	1243.8	1249.7	1241.8
160°	1262.4	1261.5	1260.5	1266.4	1259.5
162.5°	1279.1	1276.2	1275.2	1282.1	1276.2
165°	1291.9	1289.0	1288.0	1295.8	1289.0
167.5°	1302.7	1298.8	1298.8	1306.7	1298.8
170°	1311.6	1307.6	1307.6	1315.5	1307.6
172.5°	1317.5	1312.5	1313.5	1321.4	1312.5
175°	1322.4	1317.5	1318.4	1325.3	1317.5
177.5°	1324.3	1319.4	1320.4	1328.3	1318.4
180°	1322.4	1322.4	1322.4	1322.4	1322.4

(END OF REPORT)