

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: P1011316

Luminaire Tested: S123DIP-B1165D1195UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011316
REPORT IS A COMBINATION OF REPORTS P989427 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1195UB40-4F0-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

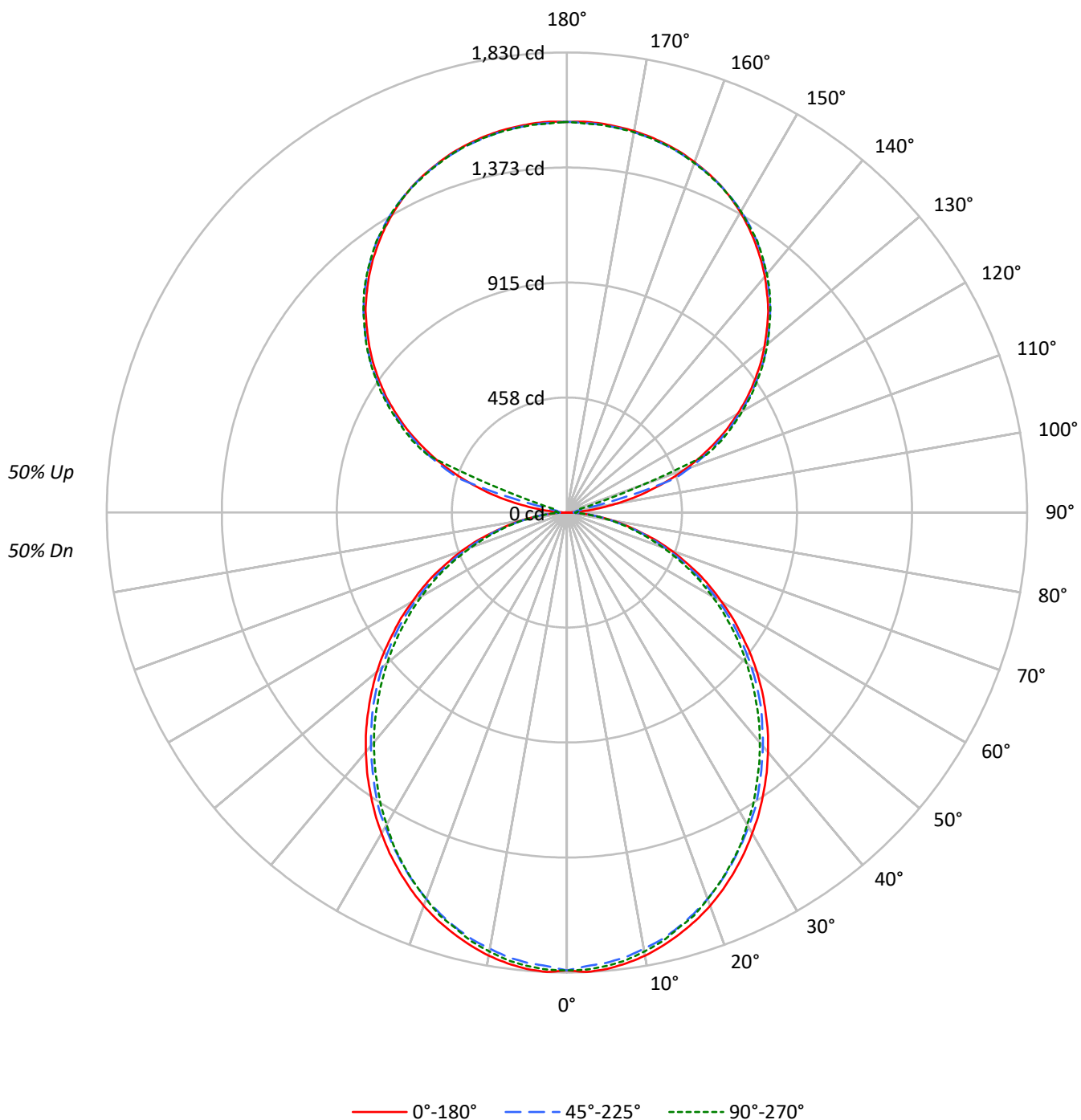
Lumens per Lamp: N/A
Luminaire Lumens: 9481.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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

TEST NUMBER: P1011316

CATALOG NUMBER: S123DIP-B1165D1195UB40-4F0-XX-W2A-F

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	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	93	89	86	90	86	83	80	73	71	68	61	59	57	50	48	47
2	89	82	75	70	82	75	70	65	64	60	57	53	50	48	44	42	40
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29
5	68	56	48	42	63	52	45	40	45	39	35	38	33	30	31	28	25
6	63	51	42	37	58	47	40	35	40	35	30	34	30	26	28	25	22
7	58	46	38	32	53	43	35	30	37	31	27	31	27	23	26	22	20
8	54	41	34	28	50	39	32	27	33	28	24	28	24	21	24	20	18
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	15

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: P1011316

CATALOG NUMBER: S123DIP-B1165D1195UB40-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.7	1.8
10°-20°	484.9	5.1
20°-30°	716.2	7.6
30°-40°	836.4	8.8
40°-50°	840.9	8.9
50°-60°	738.7	7.8
60°-70°	550.1	5.8
70°-80°	313.1	3.3
80°-90°	92.1	1.0
90°-100°	54.8	0.6
100°-110°	264.9	2.8
110°-120°	649.2	6.8
120°-130°	824.1	8.7
130°-140°	880.4	9.3
140°-150°	823.3	8.7
150°-160°	664.0	7.0
160°-170°	428.5	4.5
170°-180°	147.7	1.6
0°-30°	1372.8	14.5
0°-40°	2209.3	23.3
0°-60°	3788.8	40.0
0°-90°	4744.1	50.0
90°-120°	968.9	10.2
90°-150°	3496.7	36.9
90°-180°	4737.0	50.0
0°-180°	9481.0	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	13	28	32	35	10
95°	70	23	36	44	44	84
105°	344	357	253	48	51	365
115°	645	652	663	674	679	637
125°	910	919	924	926	928	813
135°	1132	1139	1144	1148	1144	872
145°	1307	1315	1317	1320	1320	818
155°	1440	1437	1438	1444	1437	663
165°	1518	1515	1513	1523	1515	429
175°	1554	1548	1549	1557	1548	148
180°	1554	1554	1554	1554	1554	

TEST NUMBER: P1011316

CATALOG NUMBER: S123DIP-B1165D1195UB40-4F0-XX-W2A-F

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°	1.2	12.7	27.7	32.3	34.6
92.5°	26.6	19.6	30.0	38.1	39.2
95°	70.4	23.1	35.8	43.9	43.9
97.5°	128.1	95.8	36.9	46.2	47.3
100°	195.1	218.2	38.1	47.3	48.5
102.5°	271.3	286.3	85.4	47.3	49.6
105°	344.0	356.7	252.8	48.5	50.8
107.5°	421.4	431.7	449.1	271.3	120.1
110°	498.7	507.9	520.6	482.5	317.5

TEST NUMBER: P1011316

CATALOG NUMBER: S123DIP-B1165D1195UB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	572.6	580.7	593.4	603.7	601.4
115°	645.3	652.2	662.6	674.2	678.8
117.5°	716.9	725.0	730.7	740.0	741.1
120°	782.7	793.1	796.5	805.8	805.8
122.5°	849.6	857.7	862.3	868.1	869.3
125°	909.7	918.9	923.5	925.8	928.1
127.5°	969.7	978.9	984.7	988.2	985.8
130°	1025.1	1034.3	1038.9	1043.6	1041.3
132.5°	1078.2	1087.4	1090.9	1095.5	1092.0
135°	1132.5	1139.4	1144.0	1147.5	1144.0
137.5°	1178.6	1187.9	1190.2	1195.9	1193.6
140°	1224.8	1231.7	1235.2	1239.8	1237.5
142.5°	1267.5	1274.4	1277.9	1281.4	1277.9
145°	1306.8	1314.8	1317.2	1319.5	1319.5
147.5°	1344.9	1350.6	1352.9	1355.2	1349.5
150°	1379.5	1383.0	1385.3	1387.6	1384.1
152.5°	1410.7	1411.8	1413.0	1417.6	1411.8
155°	1439.5	1437.2	1438.4	1444.1	1437.2
157.5°	1462.6	1462.6	1461.5	1468.4	1459.1
160°	1483.4	1482.2	1481.1	1488.0	1479.9
162.5°	1503.0	1499.5	1498.4	1506.5	1499.5
165°	1518.0	1514.6	1513.4	1522.6	1514.6
167.5°	1530.7	1526.1	1526.1	1535.3	1526.1
170°	1541.1	1536.5	1536.5	1545.7	1536.5
172.5°	1548.0	1542.3	1543.4	1552.6	1542.3
175°	1553.8	1548.0	1549.2	1557.3	1548.0
177.5°	1556.1	1550.3	1551.5	1560.7	1549.2
180°	1553.8	1553.8	1553.8	1553.8	1553.8

(END OF REPORT)