

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: P1011317

Luminaire Tested: S123DIP-B1165D1195UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011317
REPORT IS A COMBINATION OF REPORTS P989428 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-F1
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

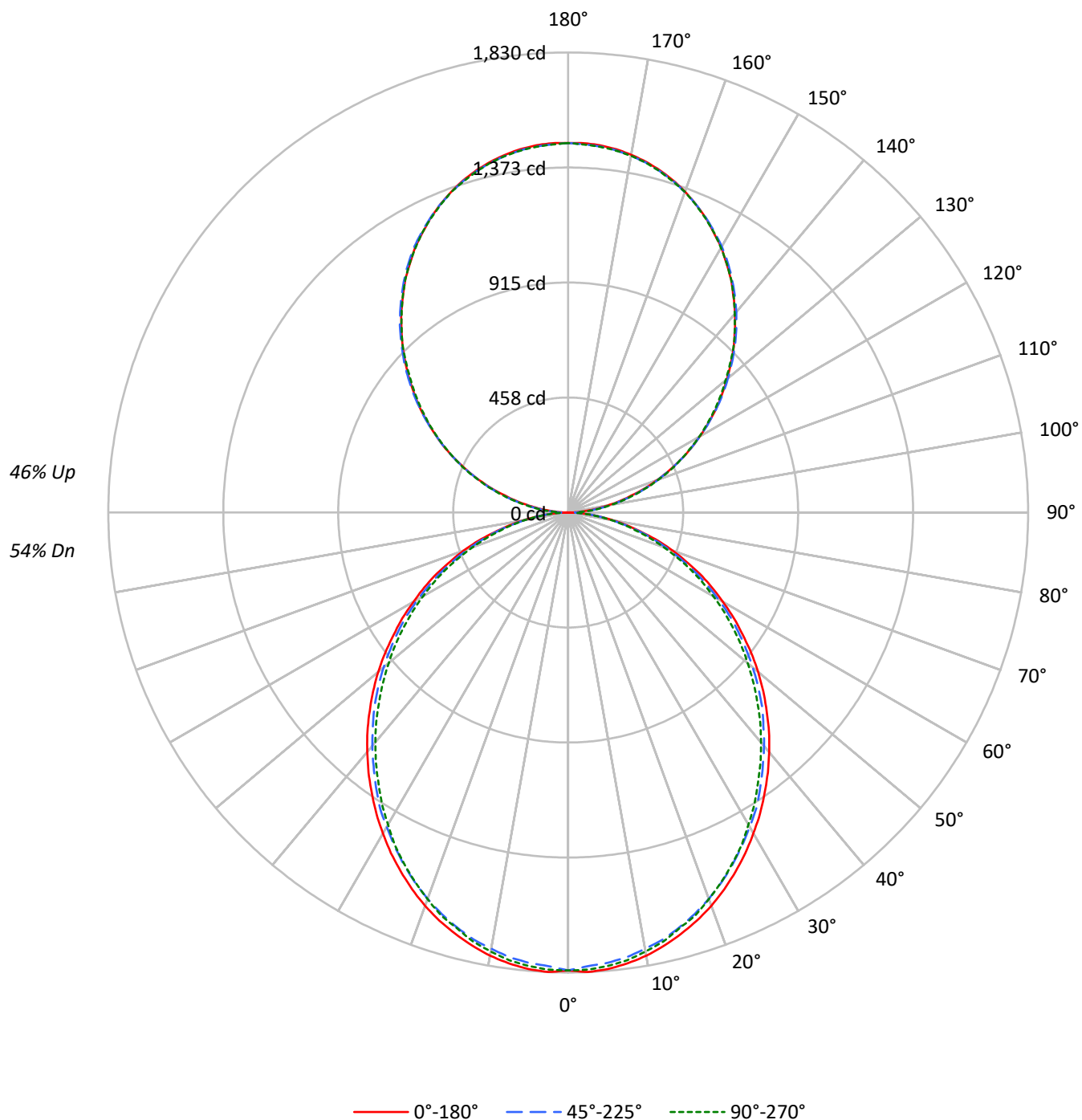
Lumens per Lamp: N/A
Luminaire Lumens: 8816.0 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	85	85	85		72	72	72		60
1	99	94	90	87	91	87	84	81	75	72	70		63	62	60		53
2	90	82	76	71	83	76	71	66	66	61	58		56	53	50		46
3	82	72	65	59	76	67	61	55	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	63	53	46	40	46	40	36		39	35	31		33
6	63	51	43	37	58	48	40	35	41	36	31		35	31	27		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	24		30	25	22		25
9	51	38	31	26	47	36	29	24	31	26	22		27	23	19		23
10	47	35	28	23	44	33	26	22	29	24	20		25	21	18		21

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	1.9
10°-20°	484.9	5.5
20°-30°	716.2	8.1
30°-40°	836.4	9.5
40°-50°	840.9	9.5
50°-60°	738.7	8.4
60°-70°	550.1	6.2
70°-80°	313.1	3.6
80°-90°	92.1	1.0
90°-100°	94.6	1.1
100°-110°	286.3	3.2
110°-120°	487.4	5.5
120°-130°	641.3	7.3
130°-140°	720.8	8.2
140°-150°	708.6	8.0
150°-160°	596.6	6.8
160°-170°	397.2	4.5
170°-180°	139.1	1.6
0°-30°	1372.8	15.6
0°-40°	2209.3	25.1
0°-60°	3788.8	43.0
0°-90°	4744.1	53.8
90°-120°	868.4	9.8
90°-150°	2939.0	33.3
90°-180°	4072.0	46.2
0°-180°	8816.0	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	11
95°	68	76	85	90	90	75
105°	260	262	272	272	275	278
115°	491	494	492	493	492	486
125°	718	722	719	715	710	640
135°	932	938	937	933	930	718
145°	1130	1132	1136	1135	1130	706
155°	1294	1294	1295	1300	1292	596
165°	1410	1406	1406	1413	1405	398
175°	1466	1462	1462	1468	1460	139
180°	1470	1470	1470	1470	1470	

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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°	1.2	12.7	27.7	32.3	34.6
92.5°	34.6	41.6	48.5	51.9	49.6
95°	68.1	76.2	85.4	90.0	90.0
97.5°	112.0	117.7	124.7	130.4	129.3
100°	157.0	163.9	169.7	173.2	175.5
102.5°	208.9	212.4	220.5	224.0	222.8
105°	259.7	262.1	272.4	272.4	274.7
107.5°	319.8	320.9	325.5	329.0	327.9
110°	375.2	377.5	379.8	384.4	382.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	432.9	434.1	434.1	439.8	439.8
115°	490.6	494.1	491.8	492.9	491.8
117.5°	549.5	550.7	548.3	548.3	544.9
120°	603.8	610.7	604.9	603.8	601.4
122.5°	660.3	664.9	662.6	659.2	655.7
125°	718.0	721.5	719.2	714.6	710.0
127.5°	771.1	778.1	775.8	768.8	764.2
130°	824.2	833.5	830.0	825.4	817.3
132.5°	877.4	886.6	884.3	878.5	872.7
135°	931.6	938.5	937.4	932.8	930.5
137.5°	981.2	987.0	990.5	984.7	981.2
140°	1033.2	1039.0	1040.1	1039.0	1030.9
142.5°	1080.5	1086.3	1088.6	1087.5	1081.7
145°	1130.2	1132.5	1135.9	1134.8	1130.2
147.5°	1172.9	1177.5	1181.0	1181.0	1174.0
150°	1217.9	1220.2	1222.5	1222.5	1215.6
152.5°	1254.8	1258.3	1259.5	1261.8	1256.0
155°	1294.1	1294.1	1295.2	1299.9	1291.8
157.5°	1327.6	1326.4	1327.6	1332.2	1325.3
160°	1358.7	1356.4	1356.4	1362.2	1357.6
162.5°	1386.4	1383.0	1384.1	1389.9	1381.8
165°	1409.5	1406.1	1406.1	1413.0	1404.9
167.5°	1429.2	1424.5	1425.7	1432.6	1425.7
170°	1445.3	1440.7	1440.7	1448.8	1440.7
172.5°	1458.0	1453.4	1453.4	1460.3	1452.2
175°	1466.1	1461.5	1461.5	1468.4	1460.3
177.5°	1470.7	1466.1	1466.1	1473.0	1464.9
180°	1469.6	1469.6	1469.6	1469.6	1469.6

(END OF REPORT)