

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: P1011361

Luminaire Tested: S123DIP-B1165D365UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011361
REPORT IS A COMBINATION OF REPORTS P989487 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB40-4F0-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

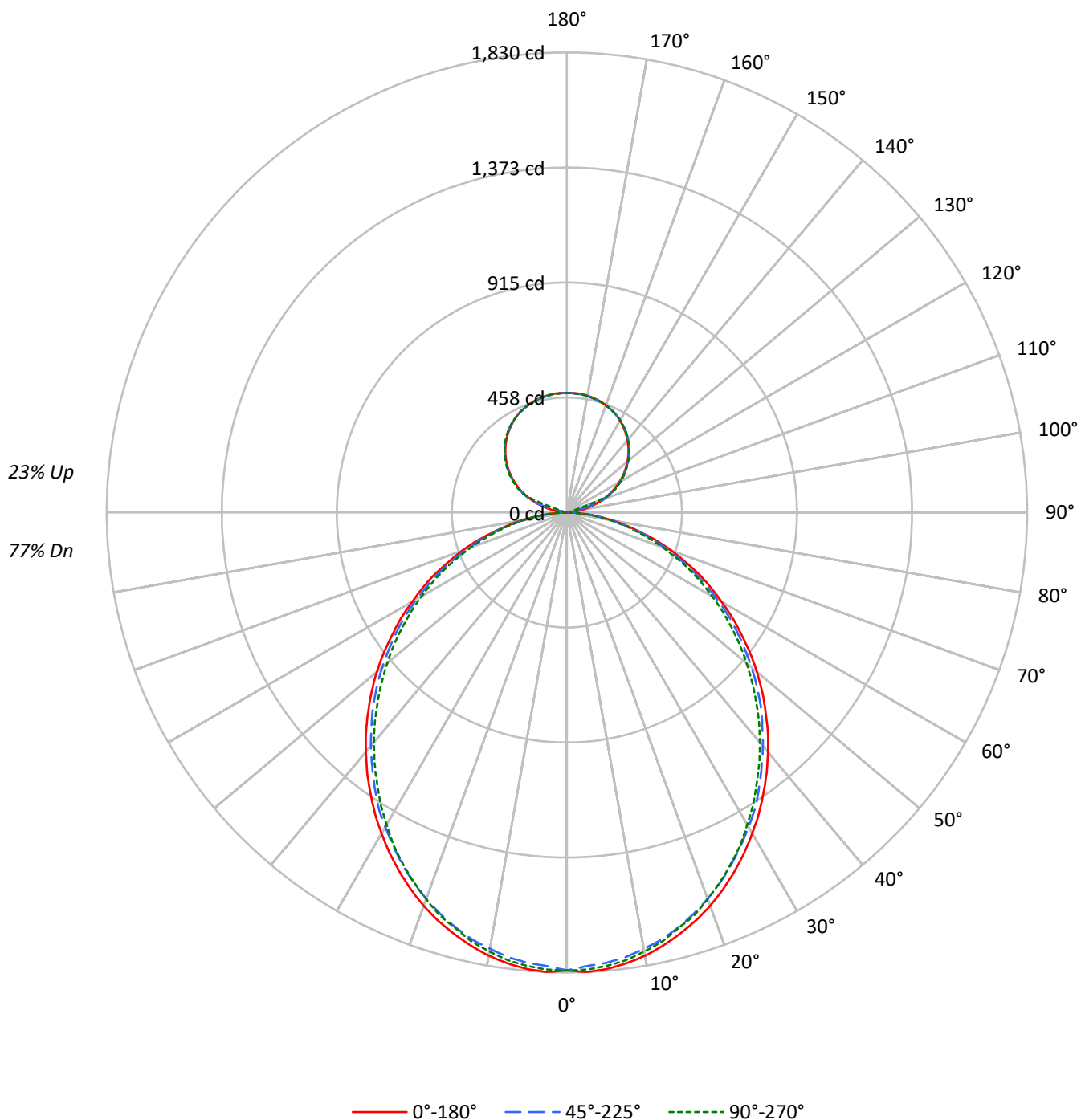
Lumens per Lamp: N/A
Luminaire Lumens: 6192.0 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81
1	104	99	95	91	99	95	91	88	86	83	81	78	76	74	71	69	68
2	94	87	80	75	90	83	77	72	75	71	67	69	65	62	63	60	57
3	86	76	68	62	82	73	66	60	67	61	56	61	56	52	55	52	49
4	79	67	59	53	75	65	57	51	59	53	48	54	49	45	50	45	42
5	73	60	52	45	69	58	50	44	53	47	42	49	43	39	45	40	37
6	67	54	46	40	64	52	44	38	48	41	36	44	39	34	41	36	32
7	62	49	41	35	59	47	39	34	44	37	32	40	35	30	37	32	29
8	58	45	37	31	55	43	36	30	40	33	29	37	31	27	34	29	26
9	54	41	33	28	51	40	32	27	37	30	26	34	28	25	31	27	23
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	25	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	2.8
10°-20°	484.9	7.8
20°-30°	716.2	11.6
30°-40°	836.4	13.5
40°-50°	840.9	13.6
50°-60°	738.7	11.9
60°-70°	550.1	8.9
70°-80°	313.1	5.1
80°-90°	90.0	1.5
90°-100°	16.8	0.3
100°-110°	81.1	1.3
110°-120°	198.7	3.2
120°-130°	252.3	4.1
130°-140°	269.5	4.4
140°-150°	252.0	4.1
150°-160°	203.3	3.3
160°-170°	131.2	2.1
170°-180°	45.2	0.7
0°-30°	1372.8	22.2
0°-40°	2209.3	35.7
0°-60°	3788.8	61.2
0°-90°	4742.0	76.6
90°-120°	296.6	4.8
90°-150°	1070.4	17.3
90°-180°	1450.0	23.4
0°-180°	6192.0	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°	0	4	8	10	11	7
95°	22	7	11	13	13	26
105°	105	109	77	15	16	112
115°	198	200	203	206	208	195
125°	278	281	283	283	284	249
135°	347	349	350	351	350	267
145°	400	402	403	404	404	250
155°	441	440	440	442	440	203
165°	465	464	463	466	464	131
175°	476	474	474	477	474	45
180°	476	476	476	476	476	

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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°	0.4	3.9	8.5	9.9	10.6
92.5°	8.1	6.0	9.2	11.7	12.0
95°	21.6	7.1	11.0	13.4	13.4
97.5°	39.2	29.3	11.3	14.1	14.5
100°	59.7	66.8	11.7	14.5	14.8
102.5°	83.0	87.6	26.1	14.5	15.2
105°	105.3	109.2	77.4	14.8	15.5
107.5°	129.0	132.2	137.5	83.0	36.8
110°	152.7	155.5	159.4	147.7	97.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.3	177.7	181.6	184.8	184.1
115°	197.5	199.7	202.8	206.4	207.8
117.5°	219.4	221.9	223.7	226.5	226.9
120°	239.6	242.8	243.8	246.7	246.7
122.5°	260.1	262.6	264.0	265.7	266.1
125°	278.5	281.3	282.7	283.4	284.1
127.5°	296.8	299.7	301.4	302.5	301.8
130°	313.8	316.6	318.0	319.5	318.7
132.5°	330.1	332.9	333.9	335.4	334.3
135°	346.7	348.8	350.2	351.3	350.2
137.5°	360.8	363.6	364.3	366.1	365.4
140°	374.9	377.1	378.1	379.5	378.8
142.5°	388.0	390.1	391.2	392.2	391.2
145°	400.0	402.5	403.2	403.9	403.9
147.5°	411.7	413.5	414.2	414.9	413.1
150°	422.3	423.3	424.1	424.8	423.7
152.5°	431.8	432.2	432.5	433.9	432.2
155°	440.7	440.0	440.3	442.1	440.0
157.5°	447.7	447.7	447.4	449.5	446.7
160°	454.1	453.7	453.4	455.5	453.0
162.5°	460.1	459.0	458.7	461.2	459.0
165°	464.7	463.6	463.3	466.1	463.6
167.5°	468.6	467.2	467.2	470.0	467.2
170°	471.8	470.3	470.3	473.2	470.3
172.5°	473.9	472.1	472.5	475.3	472.1
175°	475.6	473.9	474.2	476.7	473.9
177.5°	476.4	474.6	474.9	477.8	474.2
180°	475.6	475.6	475.6	475.6	475.6

(END OF REPORT)