

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: P1031539

Luminaire Tested: S123DIW-B1165D755UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031539
REPORT IS A COMBINATION OF REPORTS P991159 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB35-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

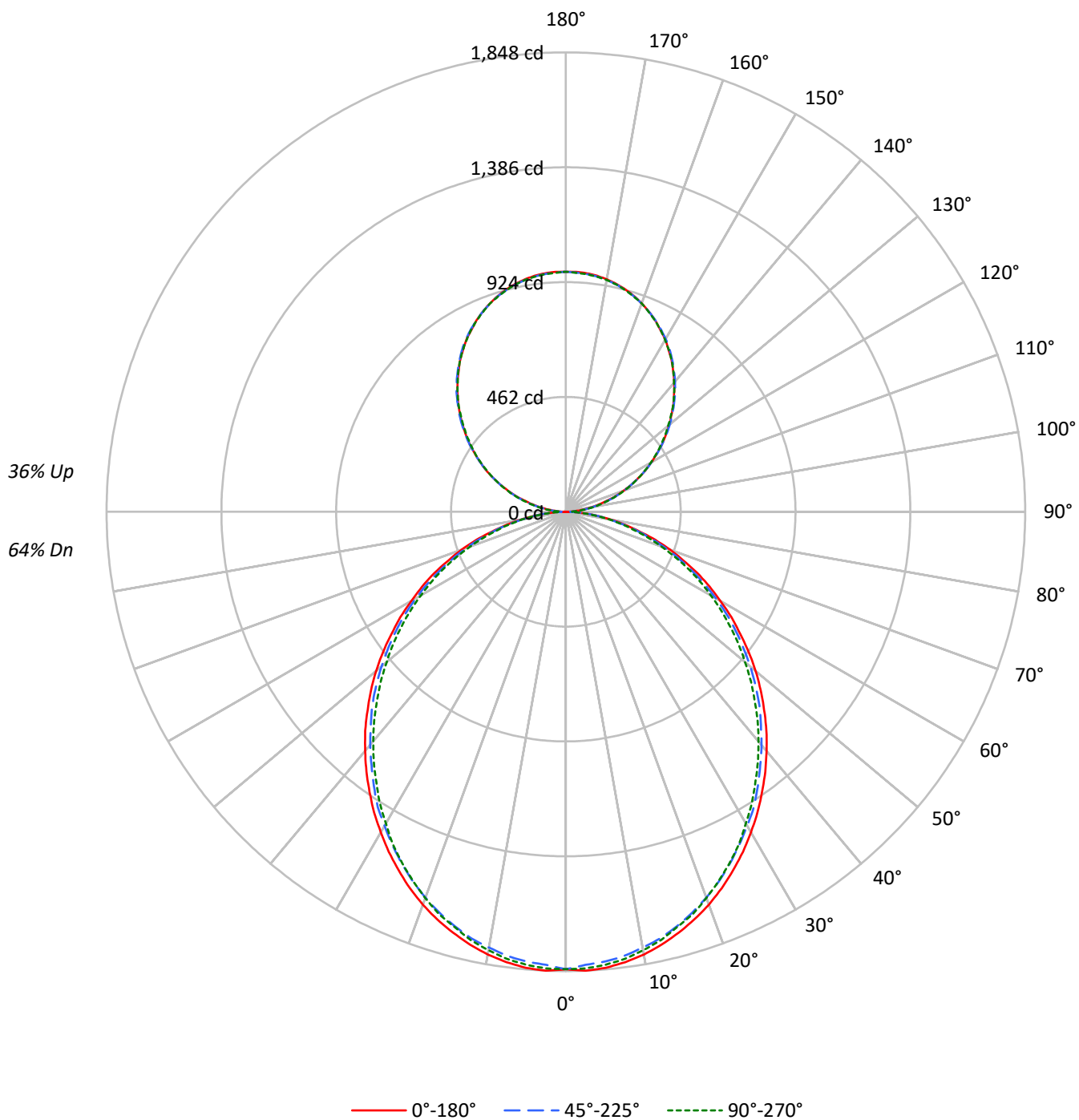
Lumens per Lamp: N/A
Luminaire Lumens: 7466.0 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84.5
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	111	111	111	111		104	104	104	104		91	91	91		80	80	80		69	69	69
1	101	96	92	89		95	91	87	84		80	77	75		70	68	66		61	60	58
2	92	84	78	73		86	79	74	69		70	66	62		62	58	55		54	51	49
3	84	74	66	60		78	70	63	58		62	56	52		54	50	47		48	44	42
4	77	66	57	51		72	62	55	49		55	49	44		48	44	40		42	39	36
5	70	58	50	44		66	55	48	42		49	43	38		44	39	35		38	34	31
6	65	53	44	38		61	50	42	37		44	38	34		39	34	31		35	31	28
7	60	48	39	34		56	45	38	32		40	34	30		36	31	27		32	28	25
8	56	43	35	30		52	41	34	29		37	31	26		33	28	24		29	25	22
9	52	40	32	27		49	38	30	26		34	28	24		30	25	22		27	23	20
10	49	36	29	24		46	35	28	23		31	25	21		28	23	20		25	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19807	19807	19807
5°	19856	19123	19094
10°	19680	18476	18287
15°	19406	17803	17406
20°	19092	17055	16532
25°	18686	16267	15600
30°	18242	15451	14618
35°	17776	14618	13643
40°	17290	13742	12683
45°	16754	12889	11681
50°	16209	11939	10675
55°	15510	10948	9656
60°	14789	9857	8571
65°	14113	8675	7440
70°	13140	7364	6120
75°	11735	5832	4751
80°	10136	4098	3361
85°	7905	2203	1682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16754 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	2.3
10°-20°	489.8	6.6
20°-30°	723.4	9.7
30°-40°	844.9	11.3
40°-50°	849.4	11.4
50°-60°	746.1	10.0
60°-70°	555.7	7.4
70°-80°	316.2	4.2
80°-90°	91.9	1.2
90°-100°	62.2	0.8
100°-110°	188.1	2.5
110°-120°	320.2	4.3
120°-130°	421.3	5.6
130°-140°	473.5	6.3
140°-150°	465.5	6.2
150°-160°	391.9	5.2
160°-170°	260.9	3.5
170°-180°	91.4	1.2
0°-30°	1386.7	18.6
0°-40°	2231.6	29.9
0°-60°	3827.2	51.3
0°-90°	4791.0	64.2
90°-120°	570.5	7.6
90°-150°	1930.7	25.9
90°-180°	2675.0	35.8
0°-180°	7466.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1840	1840	1840	1840	1840	
5°	1842	1834	1816	1832	1829	175
15°	1753	1747	1726	1739	1729	494
25°	1592	1582	1562	1563	1558	733
35°	1376	1367	1346	1337	1329	861
45°	1128	1122	1101	1082	1074	871
55°	856	854	834	816	808	767
65°	584	576	560	547	543	576
75°	308	302	298	290	285	330
85°	82	79	79	76	76	88
90°	1	8	18	21	23	9
95°	45	50	56	59	59	49
105°	171	172	179	179	180	183
115°	322	325	323	324	323	319
125°	472	474	472	469	466	421
135°	612	617	616	613	611	472
145°	742	744	746	746	742	464
155°	850	850	851	854	849	391
165°	926	924	924	928	923	261
175°	963	960	960	965	959	92
180°	965	965	965	965	965	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1840.1	1840.1	1840.1	1840.1	1840.1
2.5°	1848.0	1841.7	1824.3	1840.1	1838.5
5°	1841.7	1833.8	1816.4	1832.2	1829.0
7.5°	1827.5	1819.5	1802.1	1816.4	1814.8
10°	1808.5	1800.6	1780.0	1794.2	1791.1
12.5°	1783.2	1776.8	1757.8	1767.3	1765.7
15°	1753.1	1746.8	1726.2	1738.9	1729.4
17.5°	1719.9	1712.0	1691.4	1700.9	1697.7
20°	1681.9	1672.4	1651.8	1658.2	1653.4
22.5°	1639.2	1629.7	1609.1	1613.9	1607.5
25°	1591.7	1582.2	1561.6	1563.2	1558.5
27.5°	1542.7	1533.2	1511.0	1512.6	1507.8
30°	1488.9	1481.0	1458.8	1458.8	1447.7
32.5°	1435.1	1424.0	1408.2	1397.1	1392.3
35°	1376.5	1367.0	1346.5	1337.0	1329.1
37.5°	1318.0	1305.3	1284.8	1273.7	1268.9
40°	1256.3	1246.8	1224.6	1212.0	1205.6
42.5°	1194.6	1183.5	1161.3	1148.7	1142.4
45°	1128.1	1121.8	1101.2	1082.2	1074.3
47.5°	1063.2	1053.8	1034.8	1015.8	1009.5
50°	996.8	988.9	968.3	950.9	941.4
52.5°	927.2	922.4	900.3	886.0	876.5
55°	856.0	854.4	833.8	816.4	808.5
57.5°	789.5	783.2	767.4	751.6	742.1
60°	716.7	715.2	696.2	681.9	674.0
62.5°	651.9	647.1	628.1	613.9	609.2
65°	583.8	575.9	560.1	547.4	542.7
67.5°	511.1	504.7	492.1	481.0	474.7
70°	446.2	436.7	427.2	416.1	408.2
72.5°	378.1	371.8	360.7	351.3	348.1
75°	308.5	302.2	297.5	289.5	284.8
77.5°	246.8	243.7	237.3	231.0	231.0
80°	186.7	182.0	178.8	177.2	177.2
82.5°	128.2	128.2	128.2	125.0	123.4
85°	82.3	79.1	79.1	75.9	75.9
87.5°	41.1	36.4	34.8	33.2	33.2
90°	0.8	8.3	18.2	21.2	22.8
92.5°	22.8	27.3	31.9	34.1	32.6
95°	44.7	50.1	56.1	59.2	59.2
97.5°	73.6	77.4	81.9	85.7	84.9
100°	103.1	107.7	111.5	113.8	115.3
102.5°	137.3	139.5	144.8	147.1	146.4
105°	170.6	172.1	179.0	179.0	180.5
107.5°	210.1	210.8	213.9	216.1	215.4
110°	246.5	248.0	249.5	252.5	251.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.4	285.1	285.1	288.9	288.9
115°	322.3	324.6	323.1	323.8	323.1
117.5°	361.0	361.7	360.2	360.2	358.0
120°	396.6	401.2	397.4	396.6	395.1
122.5°	433.8	436.8	435.3	433.0	430.8
125°	471.7	474.0	472.5	469.4	466.4
127.5°	506.6	511.1	509.6	505.1	502.0
130°	541.5	547.5	545.3	542.2	536.9
132.5°	576.4	582.4	580.9	577.1	573.3
135°	612.0	616.6	615.8	612.8	611.2
137.5°	644.6	648.4	650.7	646.9	644.6
140°	678.7	682.5	683.3	682.5	677.2
142.5°	709.8	713.6	715.1	714.4	710.6
145°	742.4	744.0	746.2	745.5	742.4
147.5°	770.5	773.5	775.8	775.8	771.3
150°	800.1	801.6	803.1	803.1	798.6
152.5°	824.3	826.6	827.4	828.9	825.1
155°	850.1	850.1	850.9	853.9	848.6
157.5°	872.1	871.4	872.1	875.2	870.6
160°	892.6	891.1	891.1	894.9	891.8
162.5°	910.8	908.5	909.3	913.1	907.8
165°	926.0	923.7	923.7	928.2	922.9
167.5°	938.9	935.8	936.6	941.1	936.6
170°	949.5	946.4	946.4	951.8	946.4
172.5°	957.8	954.8	954.8	959.3	954.0
175°	963.1	960.1	960.1	964.6	959.3
177.5°	966.2	963.1	963.1	967.7	962.4
180°	965.4	965.4	965.4	965.4	965.4

(END OF REPORT)