

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: P1031509

Luminaire Tested: S123DIW-B1165D460UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031509
REPORT IS A COMBINATION OF REPORTS P991093 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D460UB35-4F0-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

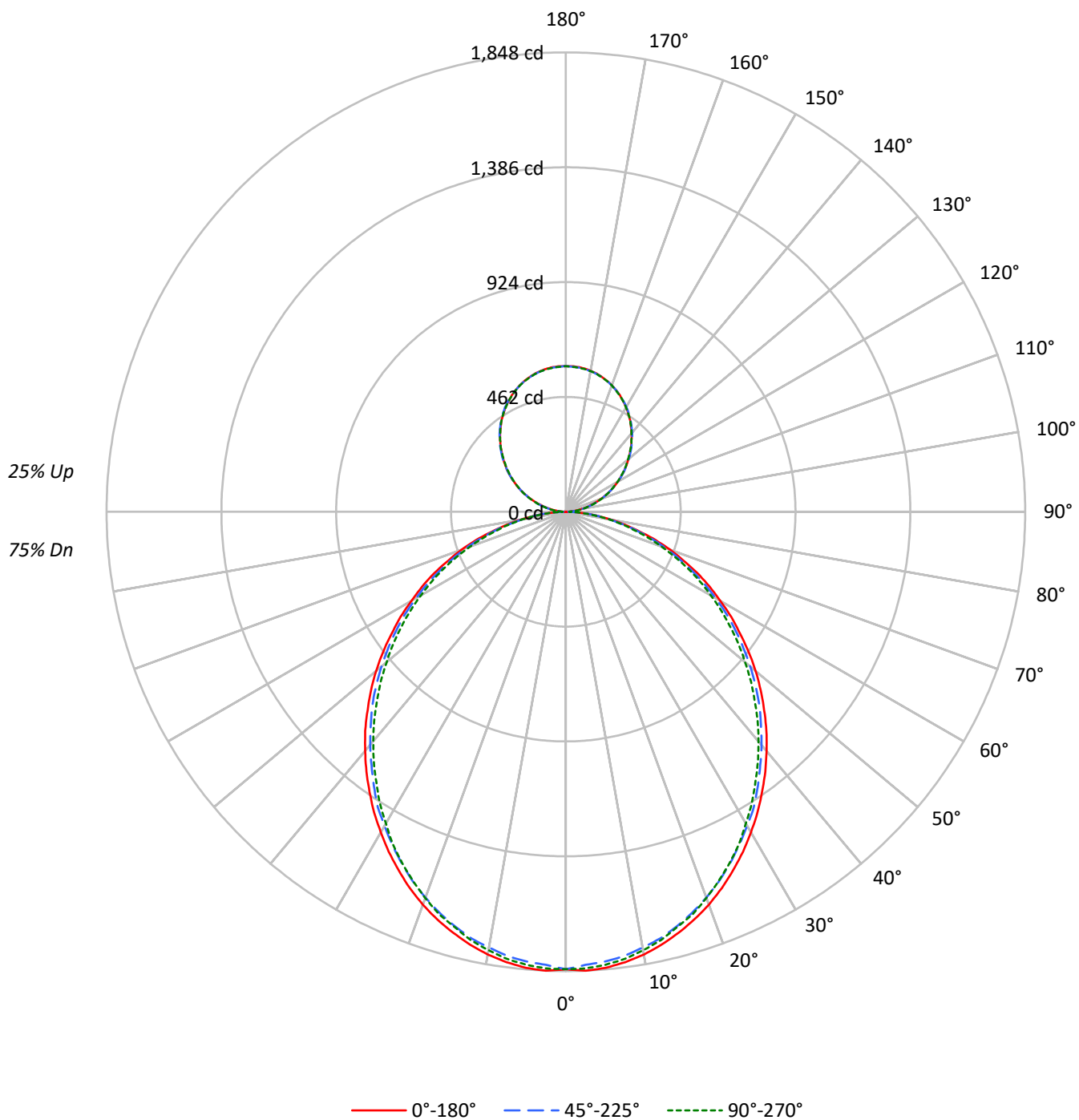
Lumens per Lamp: N/A
Luminaire Lumens: 6413.0 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79
1	103	99	95	91	98	94	90	87	85	82	80	77	75	73	70	68	66
2	94	86	80	74	89	82	76	71	75	70	66	68	64	61	61	58	56
3	86	76	68	62	81	72	65	60	66	60	56	60	55	51	54	51	48
4	79	67	59	53	74	64	57	51	59	52	47	53	48	44	48	44	41
5	72	60	51	45	68	57	50	44	52	46	41	48	43	38	44	39	36
6	67	54	45	39	63	52	44	38	47	41	36	43	38	34	40	35	31
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	36	32	28
8	57	45	36	31	54	43	35	30	39	33	28	36	31	27	33	29	25
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	31	26	23
10	50	38	30	25	48	36	29	24	33	27	23	31	26	22	29	24	21

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	2.7
10°-20°	489.8	7.6
20°-30°	723.4	11.3
30°-40°	844.9	13.2
40°-50°	849.4	13.2
50°-60°	746.1	11.6
60°-70°	555.7	8.7
70°-80°	316.2	4.9
80°-90°	91.1	1.4
90°-100°	37.7	0.6
100°-110°	114.1	1.8
110°-120°	194.3	3.0
120°-130°	255.6	4.0
130°-140°	287.3	4.5
140°-150°	282.4	4.4
150°-160°	237.8	3.7
160°-170°	158.3	2.5
170°-180°	55.4	0.9
0°-30°	1386.7	21.6
0°-40°	2231.6	34.8
0°-60°	3827.2	59.7
0°-90°	4790.2	74.7
90°-120°	346.1	5.4
90°-150°	1171.3	18.3
90°-180°	1623.0	25.3
0°-180°	6413.0	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°	0	5	11	13	14	8
95°	27	30	34	36	36	30
105°	104	104	109	109	110	111
115°	196	197	196	196	196	193
125°	286	288	287	285	283	255
135°	371	374	374	372	371	286
145°	450	451	453	452	450	281
155°	516	516	516	518	515	237
165°	562	560	560	563	560	158
175°	584	582	582	585	582	56
180°	586	586	586	586	586	

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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°	0.5	5.1	11.0	12.9	13.8
92.5°	13.8	16.6	19.3	20.7	19.8
95°	27.1	30.4	34.0	35.9	35.9
97.5°	44.6	46.9	49.7	52.0	51.5
100°	62.6	65.3	67.6	69.0	69.9
102.5°	83.3	84.7	87.9	89.3	88.8
105°	103.5	104.4	108.6	108.6	109.5
107.5°	127.4	127.9	129.7	131.1	130.7
110°	149.5	150.4	151.4	153.2	152.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	172.5	173.0	173.0	175.3	175.3
115°	195.5	196.9	196.0	196.4	196.0
117.5°	219.0	219.5	218.5	218.5	217.2
120°	240.6	243.4	241.1	240.6	239.7
122.5°	263.2	265.0	264.1	262.7	261.3
125°	286.2	287.5	286.6	284.8	282.9
127.5°	307.3	310.1	309.2	306.4	304.6
130°	328.5	332.2	330.8	328.9	325.7
132.5°	349.6	353.3	352.4	350.1	347.8
135°	371.3	374.0	373.6	371.7	370.8
137.5°	391.1	393.4	394.7	392.4	391.1
140°	411.8	414.1	414.5	414.1	410.8
142.5°	430.6	432.9	433.8	433.4	431.1
145°	450.4	451.3	452.7	452.2	450.4
147.5°	467.4	469.3	470.6	470.6	467.9
150°	485.4	486.3	487.2	487.2	484.4
152.5°	500.1	501.5	501.9	502.9	500.5
155°	515.7	515.7	516.2	518.0	514.8
157.5°	529.1	528.6	529.1	530.9	528.2
160°	541.5	540.6	540.6	542.9	541.0
162.5°	552.5	551.2	551.6	553.9	550.7
165°	561.7	560.4	560.4	563.1	559.9
167.5°	569.6	567.7	568.2	570.9	568.2
170°	576.0	574.2	574.2	577.4	574.2
172.5°	581.1	579.2	579.2	582.0	578.8
175°	584.3	582.4	582.4	585.2	582.0
177.5°	586.1	584.3	584.3	587.0	583.8
180°	585.7	585.7	585.7	585.7	585.7

(END OF REPORT)