

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: P1030773

Luminaire Tested: S123DIW-B1165D460UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030773
REPORT IS A COMBINATION OF REPORTS P991076 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D460UB2750-4F0-XX-W2A-F_5000K
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

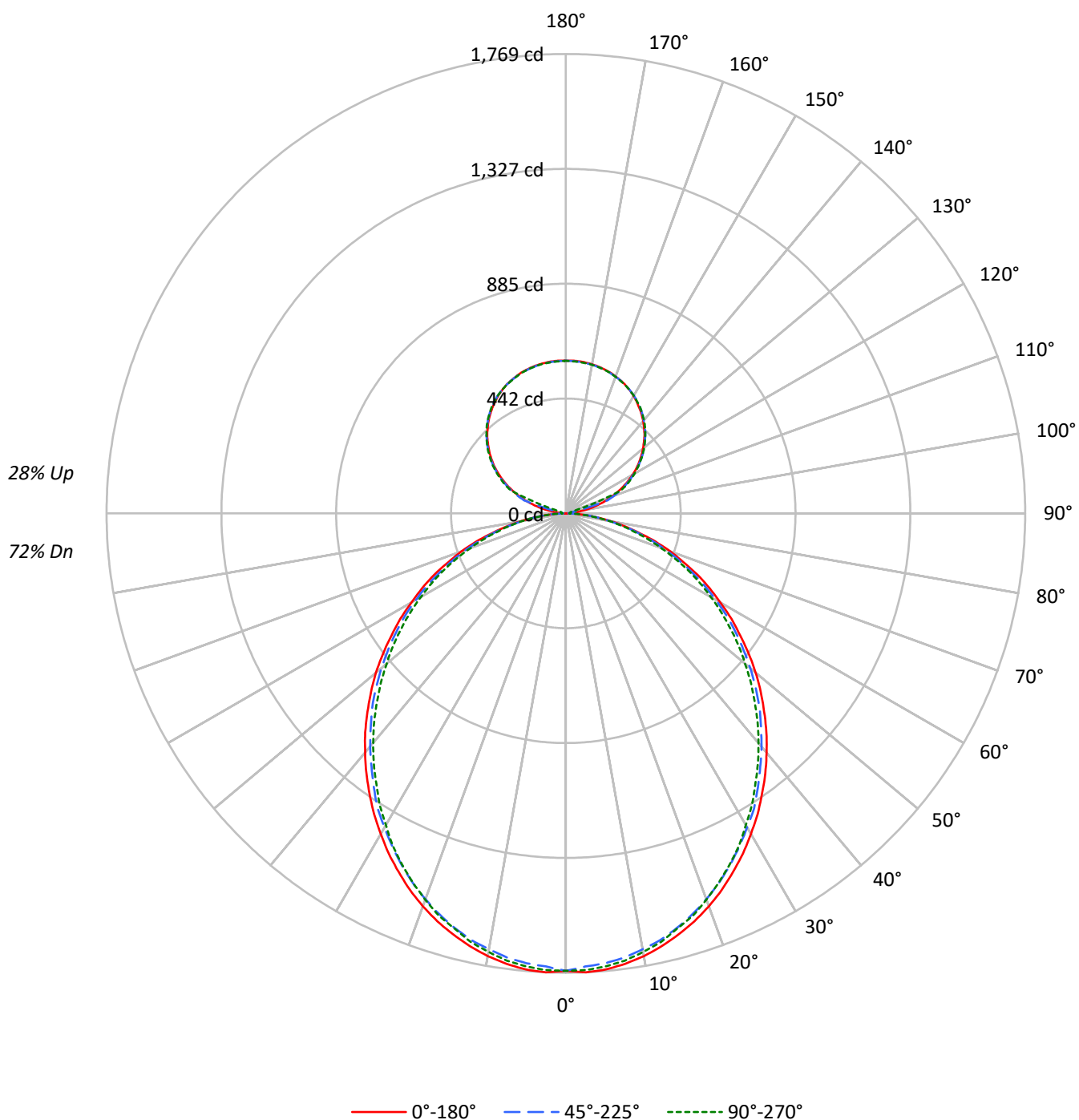
Lumens per Lamp: N/A
Luminaire Lumens: 6378.0 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	112	112	112	112	106	106	106	106	96	96	96	85	85	85	76	76	76
1	103	98	94	90	97	93	90	86	84	81	79	75	73	71	67	66	64
2	93	86	79	74	88	81	76	71	73	69	65	66	63	59	59	56	54
3	85	75	68	62	80	72	65	59	65	59	55	58	54	50	52	49	46
4	78	67	58	52	74	64	56	50	58	51	47	52	47	43	47	43	40
5	72	60	51	45	68	57	49	43	52	45	40	47	42	37	42	38	35
6	66	54	45	39	63	51	43	38	47	40	35	42	37	33	38	34	30
7	61	49	40	34	58	46	39	33	42	36	31	39	33	29	35	31	27
8	57	44	36	31	54	42	35	30	39	32	28	35	30	26	32	28	24
9	53	40	33	27	50	39	32	27	36	29	25	33	27	23	30	25	22
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	28	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18963	18963	18963
5°	19010	18309	18281
10°	18841	17689	17508
15°	18579	17045	16664
20°	18278	16330	15828
25°	17890	15574	14935
30°	17464	14793	13996
35°	17020	13994	13061
40°	16554	13157	12144
45°	16041	12340	11184
50°	15518	11431	10221
55°	14849	10482	9245
60°	14159	9436	8206
65°	13513	8305	7123
70°	12581	7050	5860
75°	11237	5583	4550
80°	9702	3924	3218
85°	7569	2108	1611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16041 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	2.6
10°-20°	469.0	7.4
20°-30°	692.6	10.9
30°-40°	808.9	12.7
40°-50°	813.2	12.8
50°-60°	714.4	11.2
60°-70°	532.0	8.3
70°-80°	302.8	4.7
80°-90°	87.2	1.4
90°-100°	20.7	0.3
100°-110°	100.2	1.6
110°-120°	245.6	3.8
120°-130°	311.7	4.9
130°-140°	333.0	5.2
140°-150°	311.4	4.9
150°-160°	251.2	3.9
160°-170°	162.1	2.5
170°-180°	55.9	0.9
0°-30°	1327.7	20.8
0°-40°	2136.6	33.5
0°-60°	3664.1	57.4
0°-90°	4586.2	71.9
90°-120°	366.5	5.7
90°-150°	1322.6	20.7
90°-180°	1792.0	28.1
0°-180°	6378.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1762	1762	1762	1762	1762	
5°	1763	1756	1739	1754	1751	167
15°	1678	1672	1653	1665	1656	473
25°	1524	1515	1495	1497	1492	702
35°	1318	1309	1289	1280	1272	825
45°	1080	1074	1054	1036	1029	834
55°	820	818	798	782	774	734
65°	559	551	536	524	520	551
75°	295	289	285	277	273	316
85°	79	76	76	73	73	84
90°	0	5	10	12	13	7
95°	27	9	14	17	17	32
105°	130	135	96	18	19	138
115°	244	247	251	255	257	241
125°	344	348	349	350	351	307
135°	428	431	433	434	433	330
145°	494	497	498	499	499	309
155°	544	544	544	546	544	251
165°	574	573	572	576	573	162
175°	588	586	586	589	586	56
180°	588	588	588	588	588	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1761.7	1761.7	1761.7	1761.7	1761.7
2.5°	1769.3	1763.2	1746.6	1761.7	1760.2
5°	1763.2	1755.7	1739.0	1754.2	1751.1
7.5°	1749.6	1742.0	1725.4	1739.0	1737.5
10°	1731.4	1723.9	1704.2	1717.8	1714.8
12.5°	1707.2	1701.1	1683.0	1692.0	1690.5
15°	1678.4	1672.4	1652.7	1664.8	1655.7
17.5°	1646.6	1639.0	1619.3	1628.4	1625.4
20°	1610.2	1601.2	1581.5	1587.5	1583.0
22.5°	1569.3	1560.3	1540.6	1545.1	1539.1
25°	1523.9	1514.8	1495.1	1496.6	1492.1
27.5°	1476.9	1467.9	1446.6	1448.2	1443.6
30°	1425.4	1417.9	1396.7	1396.7	1386.1
32.5°	1373.9	1363.3	1348.2	1337.6	1333.0
35°	1317.9	1308.8	1289.1	1280.0	1272.4
37.5°	1261.8	1249.7	1230.0	1219.4	1214.9
40°	1202.8	1193.7	1172.5	1160.3	1154.3
42.5°	1143.7	1133.1	1111.9	1099.8	1093.7
45°	1080.1	1074.0	1054.3	1036.1	1028.6
47.5°	1018.0	1008.9	990.7	972.5	966.5
50°	954.3	946.8	927.1	910.4	901.3
52.5°	887.7	883.1	861.9	848.3	839.2
55°	819.5	818.0	798.3	781.6	774.1
57.5°	755.9	749.8	734.7	719.5	710.4
60°	686.2	684.7	666.5	652.9	645.3
62.5°	624.1	619.6	601.4	587.7	583.2
65°	559.0	551.4	536.2	524.1	519.6
67.5°	489.3	483.2	471.1	460.5	454.4
70°	427.2	418.1	409.0	398.4	390.8
72.5°	362.0	356.0	345.4	336.3	333.3
75°	295.4	289.3	284.8	277.2	272.7
77.5°	236.3	233.3	227.2	221.2	221.2
80°	178.7	174.2	171.2	169.7	169.7
82.5°	122.7	122.7	122.7	119.7	118.2
85°	78.8	75.7	75.7	72.7	72.7
87.5°	39.4	34.8	33.3	31.8	31.8
90°	0.4	4.8	10.5	12.2	13.1
92.5°	10.0	7.4	11.4	14.4	14.8
95°	26.6	8.7	13.5	16.6	16.6
97.5°	48.5	36.2	14.0	17.5	17.9
100°	73.8	82.5	14.4	17.9	18.3
102.5°	102.6	108.3	32.3	17.9	18.8
105°	130.1	134.9	95.6	18.3	19.2
107.5°	159.4	163.3	169.9	102.6	45.4
110°	188.6	192.1	196.9	182.5	120.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	216.6	219.6	224.4	228.4	227.5
115°	244.1	246.7	250.6	255.0	256.8
117.5°	271.2	274.2	276.4	279.9	280.3
120°	296.1	300.0	301.3	304.8	304.8
122.5°	321.4	324.4	326.2	328.4	328.8
125°	344.1	347.6	349.3	350.2	351.1
127.5°	366.8	370.3	372.5	373.8	372.9
130°	387.8	391.3	393.0	394.7	393.9
132.5°	407.8	411.3	412.7	414.4	413.1
135°	428.4	431.0	432.7	434.0	432.7
137.5°	445.8	449.3	450.2	452.4	451.5
140°	463.3	465.9	467.2	469.0	468.1
142.5°	479.5	482.1	483.4	484.7	483.4
145°	494.3	497.4	498.2	499.1	499.1
147.5°	508.7	510.9	511.8	512.6	510.5
150°	521.8	523.1	524.0	524.9	523.6
152.5°	533.6	534.0	534.5	536.2	534.0
155°	544.5	543.7	544.1	546.3	543.7
157.5°	553.3	553.3	552.8	555.4	551.9
160°	561.1	560.7	560.2	562.9	559.8
162.5°	568.5	567.2	566.8	569.9	567.2
165°	574.2	572.9	572.5	576.0	572.9
167.5°	579.0	577.3	577.3	580.8	577.3
170°	583.0	581.2	581.2	584.7	581.2
172.5°	585.6	583.4	583.8	587.3	583.4
175°	587.8	585.6	586.0	589.1	585.6
177.5°	588.6	586.4	586.9	590.4	586.0
180°	587.8	587.8	587.8	587.8	587.8

(END OF REPORT)