

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: P1031608

Luminaire Tested: S123DIW-B340D1320UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031608
REPORT IS A COMBINATION OF REPORTS P991309 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1320UB50-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

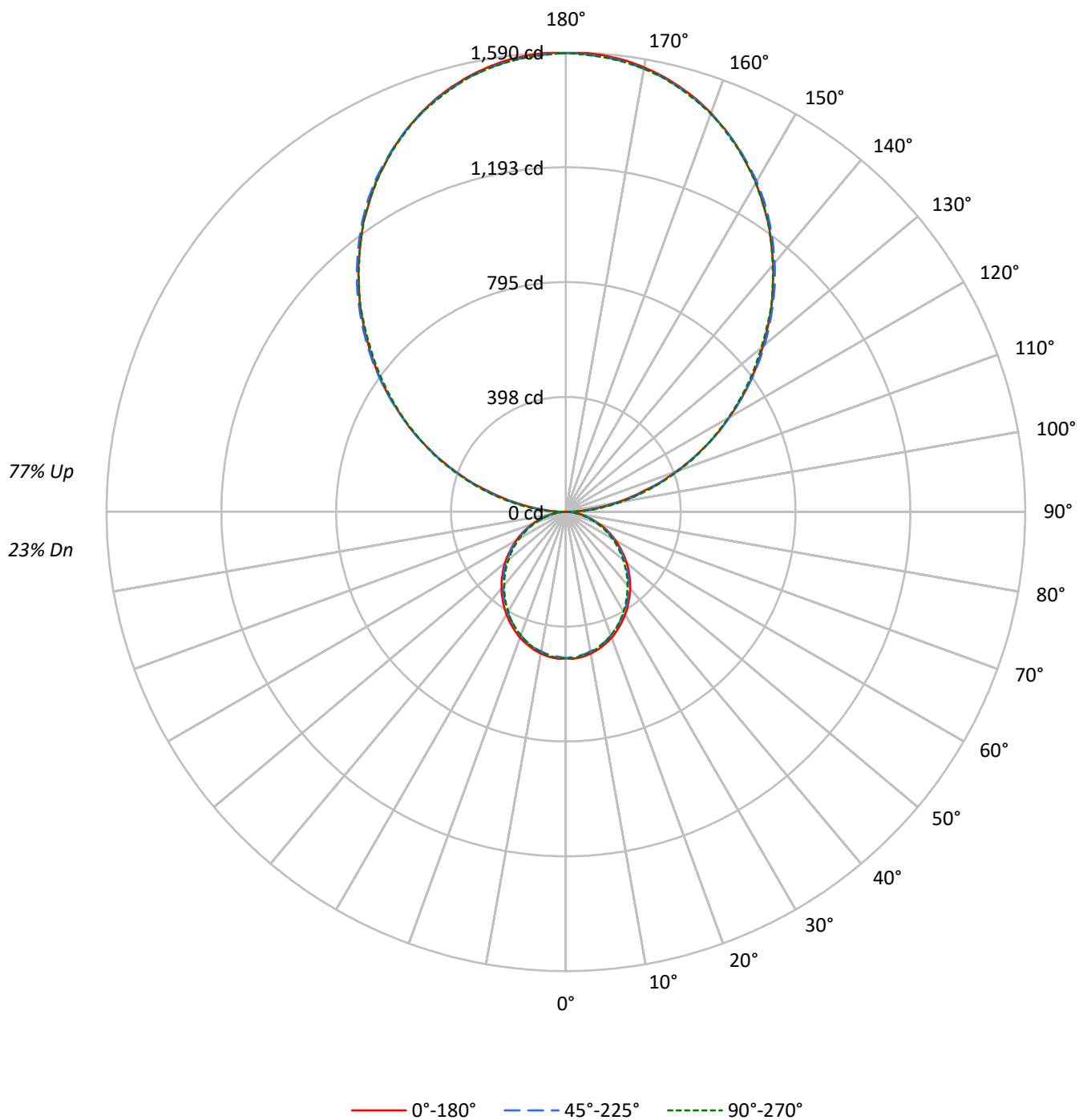
Lumens per Lamp: N/A
Luminaire Lumens: 5724.0 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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	101	101	101	101	89	89	89	89	68	68	68		49	49	49		31
1	92	88	84	80	81	78	75	72	60	58	56		43	42	41		28
2	83	76	71	66	74	68	63	59	52	49	46		38	36	34		24
3	76	67	60	54	67	60	54	49	46	42	39		33	31	29		22
4	69	59	52	46	61	53	46	41	41	36	33		30	27	24		19
5	64	53	45	39	56	47	40	35	36	32	28		26	23	21		17
6	58	47	39	34	52	42	35	31	33	28	24		24	21	18		16
7	54	42	35	29	48	38	31	27	29	25	21		22	18	16		14
8	50	38	31	26	44	34	28	23	27	22	19		20	17	14		13
9	46	35	27	23	41	31	25	21	24	20	17		18	15	13		12
10	43	32	25	20	38	28	22	18	22	18	15		17	13	11		11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5459	5459	5459
5°	5473	5271	5263
10°	5425	5092	5041
15°	5349	4907	4798
20°	5263	4701	4557
25°	5150	4483	4300
30°	5028	4259	4029
35°	4900	4029	3760
40°	4766	3787	3496
45°	4617	3552	3220
50°	4467	3291	2943
55°	4274	3017	2662
60°	4077	2717	2363
65°	3890	2391	2051
70°	3622	2029	1687
75°	3233	1607	1310
80°	2796	1130	925
85°	2180	607	463

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4617 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	0.8
10°-20°	135.0	2.4
20°-30°	199.4	3.5
30°-40°	232.9	4.1
40°-50°	234.1	4.1
50°-60°	205.7	3.6
60°-70°	153.2	2.7
70°-80°	87.2	1.5
80°-90°	28.1	0.5
90°-100°	102.2	1.8
100°-110°	309.4	5.4
110°-120°	526.8	9.2
120°-130°	693.0	12.1
130°-140°	779.0	13.6
140°-150°	765.8	13.4
150°-160°	644.8	11.3
160°-170°	429.2	7.5
170°-180°	150.3	2.6
0°-30°	382.2	6.7
0°-40°	615.1	10.7
0°-60°	1054.9	18.4
0°-90°	1323.3	23.1
90°-120°	938.5	16.4
90°-150°	3176.3	55.5
90°-180°	4401.0	76.9
0°-180°	5724.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	508	505	501	505	504	48
15°	483	482	476	479	477	136
25°	439	436	430	431	430	202
35°	379	377	371	368	366	237
45°	311	309	304	298	296	240
55°	236	236	230	225	223	211
65°	161	159	154	151	150	159
75°	85	83	82	80	78	91
85°	23	22	22	21	21	24
90°	1	14	30	35	37	7
95°	74	82	92	97	97	81
105°	281	283	294	294	297	301
115°	530	534	532	533	532	525
125°	776	780	777	772	767	692
135°	1007	1014	1013	1008	1006	776
145°	1221	1224	1228	1226	1221	763
155°	1399	1399	1400	1405	1396	644
165°	1523	1520	1520	1527	1518	430
175°	1584	1580	1580	1587	1578	151
180°	1588	1588	1588	1588	1588	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	507.2	507.2	507.2	507.2	507.2
2.5°	509.4	507.6	502.8	507.2	506.8
5°	507.6	505.4	500.7	505.0	504.1
7.5°	503.7	501.5	496.7	500.7	500.2
10°	498.5	496.3	490.6	494.5	493.7
12.5°	491.5	489.7	484.5	487.1	486.7
15°	483.2	481.5	475.8	479.3	476.7
17.5°	474.0	471.9	466.2	468.8	467.9
20°	463.6	461.0	455.3	457.0	455.7
22.5°	451.8	449.2	443.5	444.8	443.1
25°	438.7	436.1	430.4	430.9	429.6
27.5°	425.2	422.6	416.5	416.9	415.6
30°	410.4	408.2	402.1	402.1	399.0
32.5°	395.5	392.5	388.1	385.1	383.8
35°	379.4	376.8	371.1	368.5	366.3
37.5°	363.3	359.8	354.1	351.1	349.8
40°	346.3	343.7	337.5	334.1	332.3
42.5°	329.3	326.2	320.1	316.6	314.9
45°	310.9	309.2	303.5	298.3	296.1
47.5°	293.1	290.4	285.2	280.0	278.2
50°	274.7	272.6	266.9	262.1	259.5
52.5°	255.6	254.3	248.1	244.2	241.6
55°	235.9	235.5	229.8	225.0	222.9
57.5°	217.6	215.9	211.5	207.2	204.5
60°	197.6	197.1	191.9	188.0	185.8
62.5°	179.7	178.4	173.1	169.2	167.9
65°	160.9	158.7	154.4	150.9	149.6
67.5°	140.9	139.1	135.6	132.6	130.8
70°	123.0	120.4	117.7	114.7	112.5
72.5°	104.2	102.5	99.4	96.8	95.9
75°	85.0	83.3	82.0	79.8	78.5
77.5°	68.0	67.2	65.4	63.7	63.7
80°	51.5	50.2	49.3	48.8	48.8
82.5°	35.3	35.3	35.3	34.5	34.0
85°	22.7	21.8	21.8	20.9	20.9
87.5°	11.3	10.0	9.6	9.2	9.2
90°	1.2	13.7	29.9	34.9	37.4
92.5°	37.4	44.9	52.4	56.1	53.6
95°	73.6	82.3	92.3	97.3	97.3
97.5°	121.0	127.3	134.7	141.0	139.7
100°	169.7	177.2	183.4	187.1	189.6
102.5°	225.8	229.6	238.3	242.0	240.8
105°	280.7	283.2	294.4	294.4	296.9
107.5°	345.6	346.8	351.8	355.6	354.3
110°	405.5	408.0	410.5	415.5	413.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	467.9	469.1	469.1	475.3	475.3
115°	530.2	534.0	531.5	532.7	531.5
117.5°	593.9	595.1	592.6	592.6	588.9
120°	652.5	660.0	653.7	652.5	650.0
122.5°	713.6	718.6	716.1	712.4	708.6
125°	776.0	779.8	777.3	772.3	767.3
127.5°	833.4	840.9	838.4	830.9	825.9
130°	890.8	900.8	897.0	892.0	883.3
132.5°	948.2	958.2	955.7	949.4	943.2
135°	1006.8	1014.3	1013.1	1008.1	1005.6
137.5°	1060.5	1066.7	1070.5	1064.2	1060.5
140°	1116.6	1122.9	1124.1	1122.9	1114.1
142.5°	1167.8	1174.0	1176.5	1175.3	1169.0
145°	1221.4	1223.9	1227.7	1226.4	1221.4
147.5°	1267.6	1272.6	1276.3	1276.3	1268.8
150°	1316.2	1318.7	1321.2	1321.2	1313.7
152.5°	1356.2	1359.9	1361.1	1363.6	1357.4
155°	1398.6	1398.6	1399.8	1404.8	1396.1
157.5°	1434.8	1433.5	1434.8	1439.7	1432.3
160°	1468.4	1465.9	1465.9	1472.2	1467.2
162.5°	1498.4	1494.6	1495.9	1502.1	1493.4
165°	1523.3	1519.6	1519.6	1527.1	1518.3
167.5°	1544.5	1539.6	1540.8	1548.3	1540.8
170°	1562.0	1557.0	1557.0	1565.8	1557.0
172.5°	1575.7	1570.7	1570.7	1578.2	1569.5
175°	1584.5	1579.5	1579.5	1587.0	1578.2
177.5°	1589.5	1584.5	1584.5	1592.0	1583.2
180°	1588.2	1588.2	1588.2	1588.2	1588.2

(END OF REPORT)