

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: P1031726

Luminaire Tested: S123DIW-B560D1320UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031726
REPORT IS A COMBINATION OF REPORTS P991579 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1320UB27-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

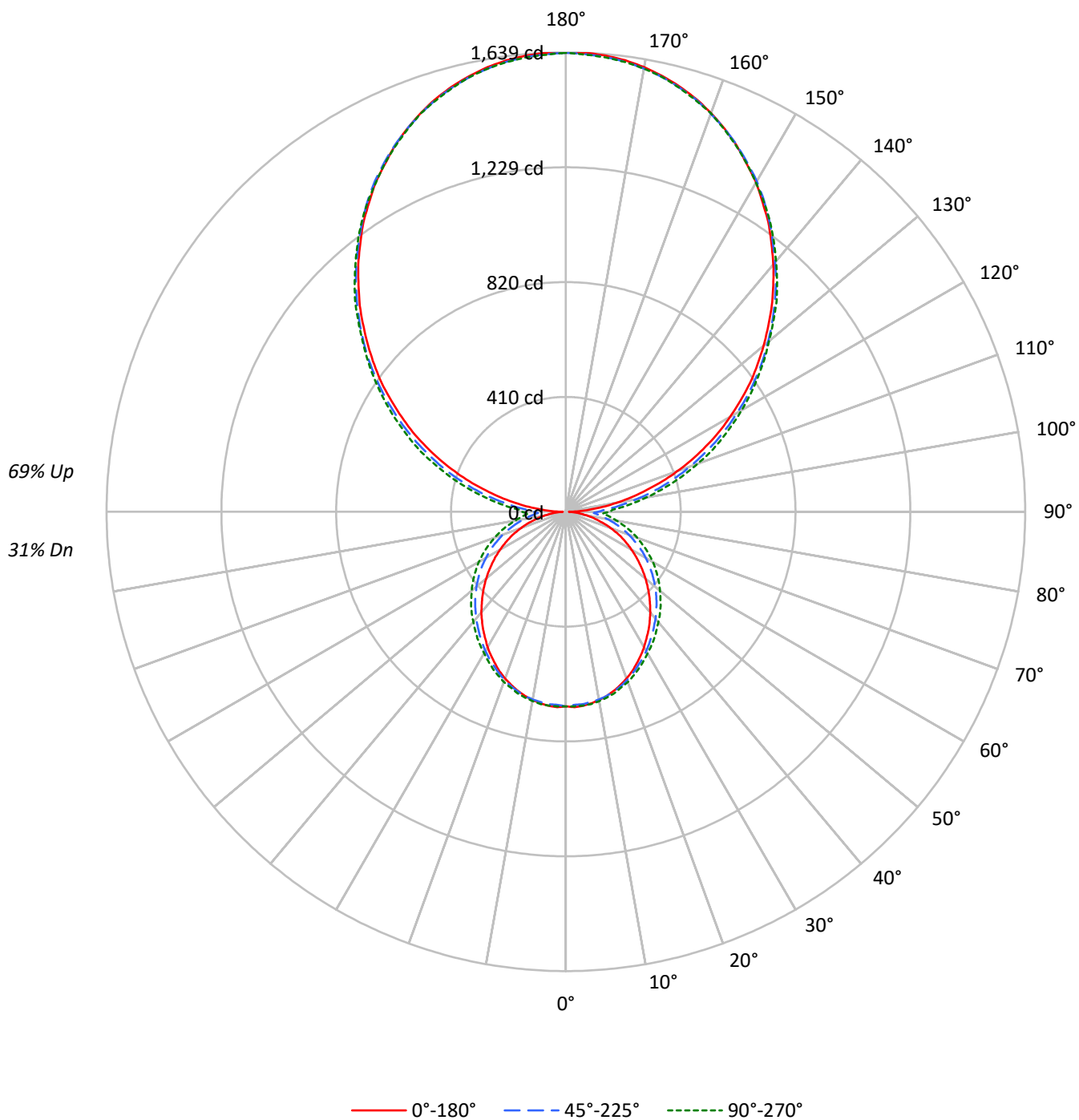
Lumens per Lamp: N/A
Luminaire Lumens: 6874.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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	30	10
RCR																	
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	93	88	84	81	83	79	76	73	63	60	58	47	46	44	33	32	31
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	27	26
3	77	67	60	54	68	61	54	49	48	43	40	36	33	31	25	23	22
4	70	59	51	45	62	53	47	41	42	37	34	32	29	26	22	20	19
5	64	53	45	39	57	47	40	35	38	33	29	29	25	22	20	18	16
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	31	25	21	25	20	17	19	16	13	14	12	10
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7472	7472	7472
5°	7492	7253	7247
10°	7423	7056	7003
15°	7325	6840	6743
20°	7184	6598	6464
25°	7013	6325	6177
30°	6838	6078	5887
35°	6641	5820	5651
40°	6452	5584	5402
45°	6243	5355	5196
50°	6038	5128	4974
55°	5809	4895	4769
60°	5586	4657	4558
65°	5357	4403	4313
70°	5009	4120	4059
75°	4572	3795	3797
80°	4066	3466	3499
85°	3564	3200	3285

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6243 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	1.0
10°-20°	187.7	2.7
20°-30°	280.7	4.1
30°-40°	335.2	4.9
40°-50°	350.7	5.1
50°-60°	329.1	4.8
60°-70°	274.9	4.0
70°-80°	196.5	2.9
80°-90°	120.4	1.8
90°-100°	178.9	2.6
100°-110°	373.1	5.4
110°-120°	579.3	8.4
120°-130°	735.2	10.7
130°-140°	812.5	11.8
140°-150°	791.6	11.5
150°-160°	664.8	9.7
160°-170°	442.6	6.4
170°-180°	155.0	2.3
0°-30°	534.3	7.8
0°-40°	869.5	12.6
0°-60°	1549.3	22.5
0°-90°	2141.1	31.1
90°-120°	1131.3	16.5
90°-150°	3470.5	50.5
90°-180°	4733.0	68.9
0°-180°	6874.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	694	694	694	694	694	
5°	695	693	689	695	694	66
15°	662	664	663	671	670	186
25°	597	605	607	617	617	275
35°	514	526	536	548	550	322
45°	420	439	458	472	478	324
55°	321	346	373	393	399	287
65°	222	251	284	307	315	219
75°	120	156	194	218	228	128
85°	37	75	115	141	148	38
90°	11	61	116	147	157	13
95°	84	123	170	199	206	90
105°	295	316	360	382	391	316
115°	550	564	588	608	612	545
125°	802	806	826	836	837	716
135°	1040	1047	1054	1062	1063	801
145°	1260	1262	1266	1271	1268	787
155°	1442	1442	1443	1448	1440	664
165°	1571	1567	1567	1575	1566	443
175°	1634	1629	1629	1636	1627	155
180°	1638	1638	1638	1638	1638	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	694.2	694.2	694.2	694.2	694.2
2.5°	698.0	695.7	689.6	695.7	694.9
5°	694.9	693.4	688.9	694.9	694.2
7.5°	689.6	689.6	685.1	692.7	691.9
10°	682.1	683.6	679.8	687.4	685.9
12.5°	673.0	675.3	673.0	679.8	678.3
15°	661.7	663.9	663.2	670.7	670.0
17.5°	648.1	652.6	651.8	658.6	657.1
20°	632.9	637.5	639.0	645.8	646.5
22.5°	617.1	621.6	623.9	632.9	632.2
25°	597.4	605.0	607.2	617.1	617.1
27.5°	578.5	586.8	591.3	599.7	600.4
30°	558.1	567.9	573.9	583.0	583.0
32.5°	535.4	546.7	555.0	564.9	567.1
35°	514.2	526.3	536.1	547.5	550.5
37.5°	491.5	505.1	516.5	529.3	531.6
40°	468.8	482.4	497.6	510.4	513.5
42.5°	443.9	461.3	477.2	491.5	496.1
45°	420.4	438.6	457.5	471.9	477.9
47.5°	395.5	415.9	437.1	453.0	457.5
50°	371.3	392.5	415.9	433.3	438.6
52.5°	345.6	368.3	394.7	412.9	419.7
55°	320.6	345.6	372.8	393.2	399.3
57.5°	296.4	322.1	351.6	372.0	378.9
60°	270.7	297.9	328.9	350.1	358.4
62.5°	246.5	274.5	307.8	328.9	336.5
65°	221.6	251.1	284.3	307.0	314.6
67.5°	196.6	227.6	260.9	285.8	291.9
70°	170.1	202.7	239.0	263.2	270.7
72.5°	145.9	178.5	216.3	241.2	248.8
75°	120.2	155.8	193.6	218.5	227.6
77.5°	98.3	133.8	171.7	198.1	204.9
80°	74.9	111.9	151.2	176.9	184.5
82.5°	54.4	92.3	132.3	158.0	165.6
85°	37.1	74.9	114.9	140.7	148.2
87.5°	22.7	60.5	99.1	124.8	132.3
90°	11.1	61.1	116.3	147.2	157.3
92.5°	47.7	87.9	133.4	162.3	166.5
95°	84.2	122.7	170.1	198.6	206.2
97.5°	132.4	166.0	209.2	238.4	244.7
100°	181.8	213.7	254.9	280.7	290.8
102.5°	238.8	263.9	307.0	332.0	338.3
105°	295.4	316.2	360.3	381.5	390.9
107.5°	361.6	378.8	415.0	439.2	444.7
110°	422.6	438.8	471.6	496.5	499.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	486.9	498.8	527.6	552.9	559.7
115°	550.5	563.5	588.1	607.5	612.3
117.5°	616.1	623.4	646.6	664.8	666.9
120°	675.8	687.3	705.9	722.0	724.6
122.5°	738.8	745.5	766.4	779.1	780.6
125°	802.5	806.3	825.6	836.4	836.6
127.5°	861.6	868.5	884.9	892.3	892.4
130°	920.8	930.3	941.5	950.8	946.3
132.5°	979.2	989.5	998.3	1005.5	1004.3
135°	1039.6	1046.7	1053.7	1062.1	1063.4
137.5°	1095.0	1100.7	1109.8	1115.4	1115.4
140°	1152.1	1158.6	1162.1	1172.2	1166.9
142.5°	1204.9	1210.5	1213.1	1221.6	1219.0
145°	1260.2	1262.0	1265.8	1270.6	1268.5
147.5°	1307.0	1312.2	1316.0	1318.3	1313.6
150°	1357.2	1359.7	1362.3	1362.3	1356.1
152.5°	1398.3	1402.2	1403.5	1406.1	1399.6
155°	1442.1	1442.1	1443.4	1448.5	1439.5
157.5°	1479.4	1478.1	1479.4	1484.5	1476.8
160°	1514.1	1511.5	1511.5	1518.0	1512.8
162.5°	1545.0	1541.1	1542.4	1548.9	1539.8
165°	1570.7	1566.9	1566.9	1574.6	1565.6
167.5°	1592.6	1587.4	1588.7	1596.5	1588.7
170°	1610.6	1605.5	1605.5	1614.5	1605.5
172.5°	1624.8	1619.6	1619.6	1627.3	1618.3
175°	1633.8	1628.6	1628.6	1636.3	1627.3
177.5°	1638.9	1633.8	1633.8	1641.5	1632.5
180°	1637.6	1637.6	1637.6	1637.6	1637.6

(END OF REPORT)