

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: P1031728

Luminaire Tested: S123DIW-B560D1320UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031728
REPORT IS A COMBINATION OF REPORTS P991582 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-F1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

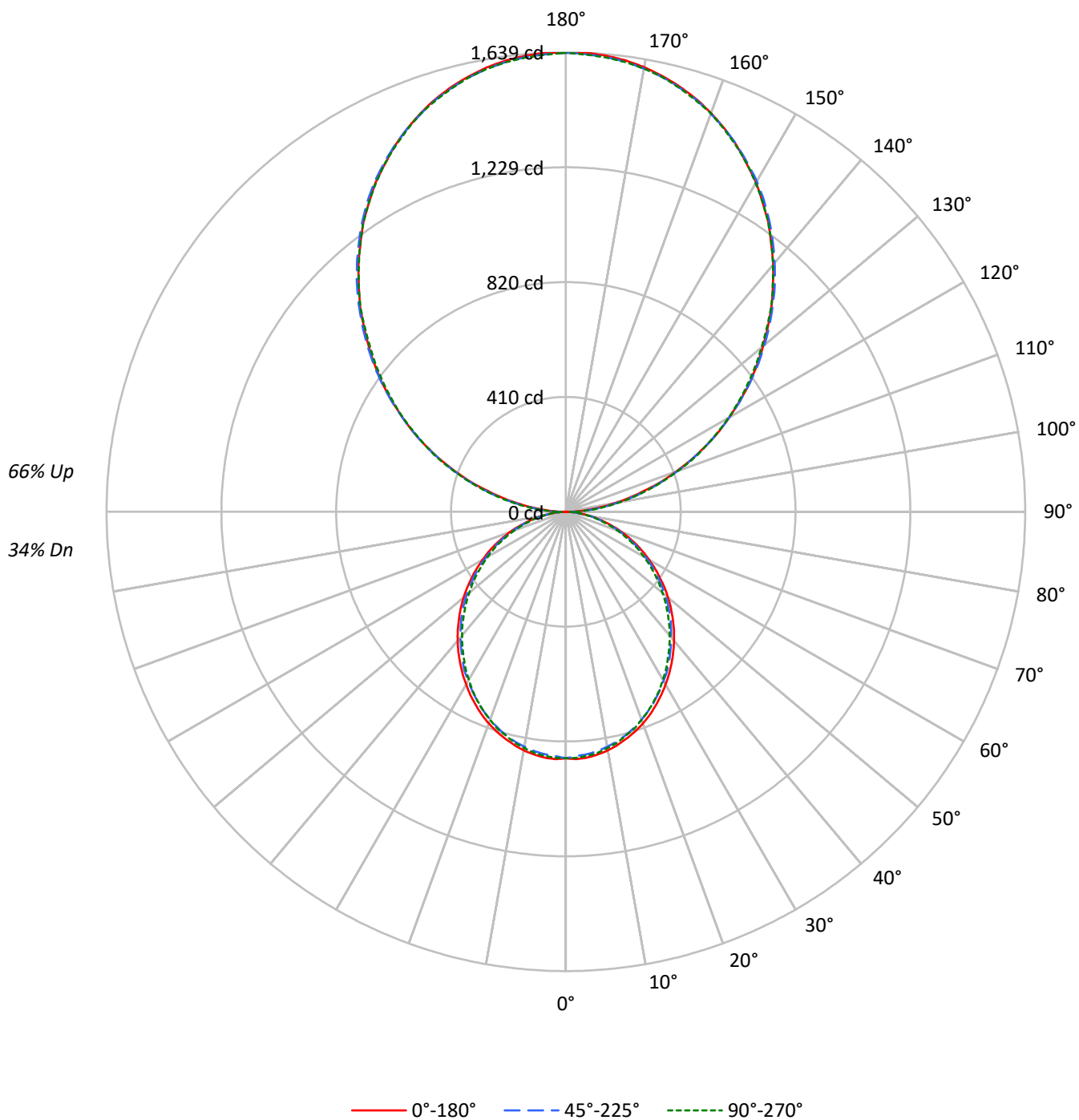
Lumens per Lamp: N/A
Luminaire Lumens: 6830.0 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25
4	71	61	53	47	64	55	48	43	44	40	36	34	31	28	25	23	21
5	65	54	46	40	59	49	42	37	40	35	31	31	27	25	23	20	18
6	60	48	40	35	54	44	37	32	36	30	27	28	24	21	20	18	16
7	55	44	36	30	50	40	33	28	32	27	23	25	22	19	19	16	14
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	18	21	18	15	16	13	12
10	45	33	26	21	40	30	24	20	25	20	17	19	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9467	9467	9467
5°	9491	9141	9126
10°	9406	8831	8741
15°	9275	8509	8320
20°	9125	8152	7902
25°	8932	7775	7456
30°	8719	7385	6987
35°	8496	6987	6521
40°	8264	6568	6063
45°	8008	6161	5583
50°	7747	5706	5103
55°	7413	5233	4615
60°	7069	4712	4097
65°	6747	4146	3556
70°	6281	3520	2925
75°	5611	2788	2271
80°	4843	1960	1606
85°	3775	1053	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8008 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.2
10°-20°	234.1	3.4
20°-30°	345.8	5.1
30°-40°	403.8	5.9
40°-50°	406.0	5.9
50°-60°	356.6	5.2
60°-70°	265.6	3.9
70°-80°	151.1	2.2
80°-90°	46.4	0.7
90°-100°	105.4	1.5
100°-110°	319.1	4.7
110°-120°	543.2	8.0
120°-130°	714.6	10.5
130°-140°	803.2	11.8
140°-150°	789.7	11.6
150°-160°	664.8	9.7
160°-170°	442.6	6.5
170°-180°	155.0	2.3
0°-30°	662.8	9.7
0°-40°	1066.7	15.6
0°-60°	1829.3	26.8
0°-90°	2292.5	33.6
90°-120°	967.7	14.2
90°-150°	3275.2	48.0
90°-180°	4538.0	66.4
0°-180°	6830.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	880	876	868	876	874	83
15°	838	835	825	831	827	236
25°	761	756	746	747	745	350
35°	658	653	644	639	635	412
45°	539	536	526	517	514	416
55°	409	408	398	390	386	367
65°	279	275	268	262	259	275
75°	148	144	142	138	136	158
85°	39	38	38	36	36	42
90°	1	14	31	36	39	8
95°	76	85	95	100	100	84
105°	289	292	304	304	306	310
115°	547	551	548	549	548	541
125°	800	804	801	796	791	714
135°	1038	1046	1045	1039	1037	800
145°	1259	1262	1266	1265	1259	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°	879.5	879.5	879.5	879.5	879.5
2.5°	883.3	880.3	872.0	879.5	878.8
5°	880.3	876.5	868.2	875.7	874.2
7.5°	873.5	869.7	861.4	868.2	867.4
10°	864.4	860.6	850.8	857.6	856.1
12.5°	852.3	849.3	840.2	844.7	844.0
15°	837.9	834.9	825.1	831.1	826.6
17.5°	822.0	818.3	808.4	813.0	811.5
20°	803.9	799.4	789.5	792.6	790.3
22.5°	783.5	778.9	769.1	771.4	768.4
25°	760.8	756.3	746.4	747.2	744.9
27.5°	737.3	732.8	722.2	723.0	720.7
30°	711.6	707.9	697.3	697.3	692.0
32.5°	685.9	680.6	673.1	667.8	665.5
35°	657.9	653.4	643.6	639.0	635.3
37.5°	630.0	623.9	614.1	608.8	606.5
40°	600.5	595.9	585.3	579.3	576.3
42.5°	571.0	565.7	555.1	549.0	546.0
45°	539.2	536.2	526.4	517.3	513.5
47.5°	508.2	503.7	494.6	485.5	482.5
50°	476.4	472.7	462.8	454.5	450.0
52.5°	443.2	440.9	430.3	423.5	419.0
55°	409.1	408.4	398.5	390.2	386.4
57.5°	377.4	374.3	366.8	359.2	354.7
60°	342.6	341.8	332.8	325.9	322.2
62.5°	311.6	309.3	300.2	293.4	291.2
65°	279.1	275.3	267.7	261.7	259.4
67.5°	244.3	241.2	235.2	229.9	226.9
70°	213.3	208.7	204.2	198.9	195.1
72.5°	180.7	177.7	172.4	167.9	166.4
75°	147.5	144.4	142.2	138.4	136.1
77.5°	118.0	116.5	113.4	110.4	110.4
80°	89.2	87.0	85.5	84.7	84.7
82.5°	61.3	61.3	61.3	59.7	59.0
85°	39.3	37.8	37.8	36.3	36.3
87.5°	19.7	17.4	16.6	15.9	15.9
90°	1.3	14.2	30.9	36.0	38.6
92.5°	38.6	46.3	54.0	57.9	55.3
95°	75.9	84.9	95.2	100.3	100.3
97.5°	124.8	131.2	138.9	145.4	144.1
100°	175.0	182.7	189.1	193.0	195.5
102.5°	232.8	236.7	245.7	249.6	248.3
105°	289.4	292.0	303.6	303.6	306.2
107.5°	356.3	357.6	362.8	366.6	365.3
110°	418.1	420.7	423.2	428.4	425.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	482.4	483.7	483.7	490.1	490.1
115°	546.7	550.6	548.0	549.3	548.0
117.5°	612.3	613.6	611.1	611.1	607.2
120°	672.8	680.5	674.1	672.8	670.2
122.5°	735.8	741.0	738.4	734.5	730.7
125°	800.2	804.0	801.4	796.3	791.2
127.5°	859.3	867.0	864.5	856.8	851.6
130°	918.5	928.8	924.9	919.8	910.8
132.5°	977.7	988.0	985.4	979.0	972.5
135°	1038.1	1045.9	1044.6	1039.4	1036.9
137.5°	1093.5	1099.9	1103.8	1097.3	1093.5
140°	1151.3	1157.8	1159.1	1157.8	1148.8
142.5°	1204.1	1210.5	1213.1	1211.8	1205.4
145°	1259.4	1262.0	1265.8	1264.6	1259.4
147.5°	1307.0	1312.2	1316.0	1316.0	1308.3
150°	1357.2	1359.7	1362.3	1362.3	1354.6
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)