

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: P1033152

Luminaire Tested: S124DIW-B1020D1560UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033152
REPORT IS A COMBINATION OF REPORTS P996755 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1560UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

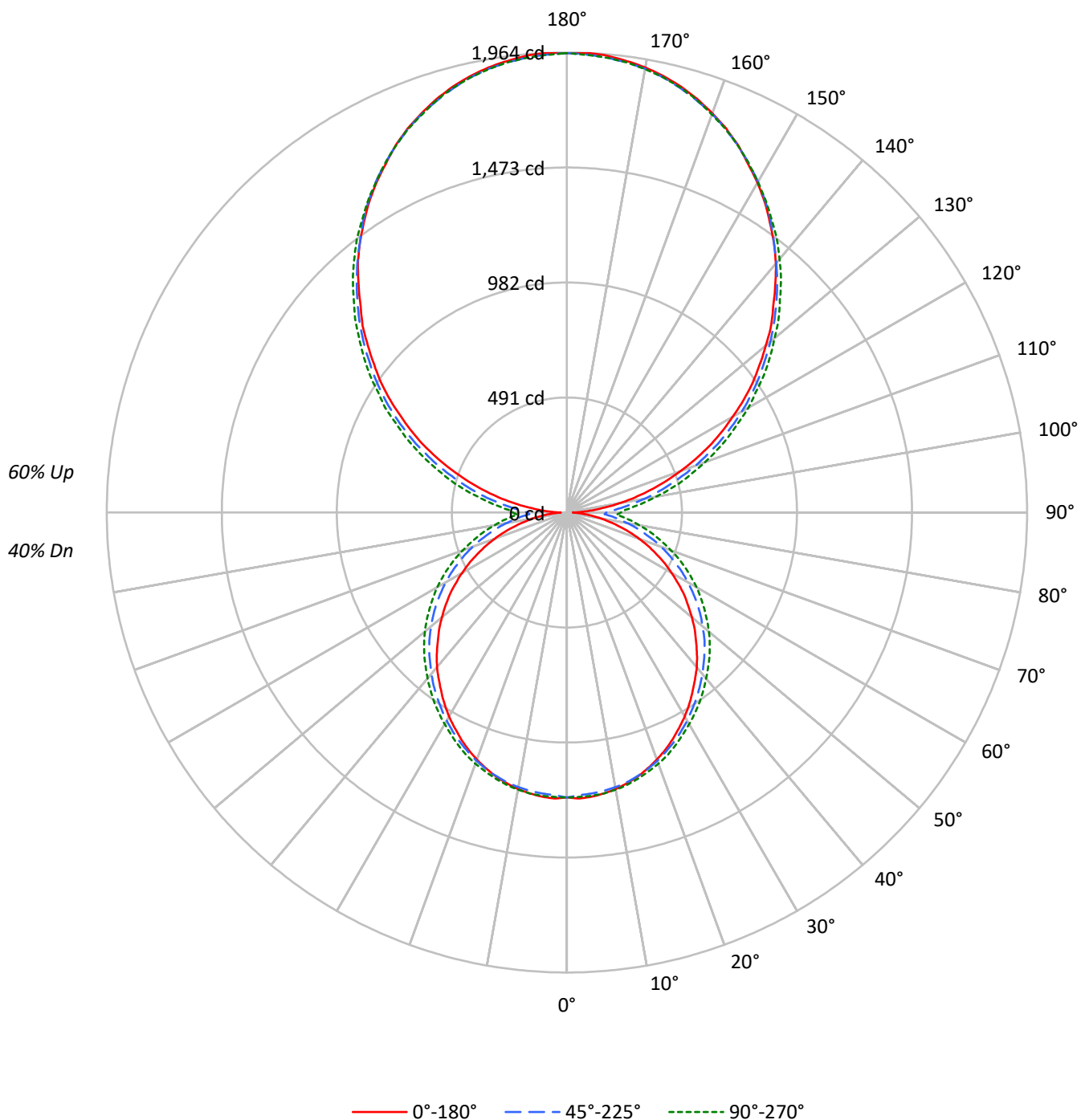
Lumens per Lamp: N/A
Luminaire Lumens: 9594.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 99
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	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40		
1	95	90	86	82	86	82	79	75	67	64	62	53	51	50	40	39	38	32		
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	31	26		
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	31	28	26	22		
4	71	60	52	46	64	55	48	43	45	40	36	36	32	29	27	25	22	18		
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	24	22	19	16		
6	60	48	40	34	54	44	37	31	36	31	26	29	25	22	22	19	17	14		
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	20	17	15	12		
8	51	39	31	26	46	36	29	24	30	24	20	24	20	17	18	15	13	11		
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12	10		
10	44	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11	9		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9921	9921	9921
5°	9948	9663	9680
10°	9884	9472	9445
15°	9791	9259	9181
20°	9654	9027	8923
25°	9499	8772	8646
30°	9333	8519	8363
35°	9144	8261	8111
40°	8992	8012	7851
45°	8768	7780	7620
50°	8577	7515	7378
55°	8379	7260	7098
60°	8072	6942	6834
65°	7734	6601	6517
70°	7324	6209	6151
75°	6752	5776	5802
80°	6108	5332	5436
85°	5254	4887	5140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8768 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.2
10°-20°	330.3	3.4
20°-30°	499.4	5.2
30°-40°	604.2	6.3
40°-50°	638.7	6.7
50°-60°	601.1	6.3
60°-70°	498.8	5.2
70°-80°	350.0	3.6
80°-90°	201.5	2.1
90°-100°	245.3	2.6
100°-110°	469.9	4.9
110°-120°	708.9	7.4
120°-130°	890.8	9.3
130°-140°	977.8	10.2
140°-150°	949.9	9.9
150°-160°	796.5	8.3
160°-170°	530.0	5.5
170°-180°	185.6	1.9
0°-30°	945.0	9.8
0°-40°	1549.1	16.1
0°-60°	2789.0	29.1
0°-90°	3839.4	40.0
90°-120°	1424.1	14.8
90°-150°	4242.5	44.2
90°-180°	5755.0	60.0
0°-180°	9594.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1214	1204	1215	1214	116
15°	1168	1169	1165	1177	1176	329
25°	1068	1076	1080	1095	1097	492
35°	935	951	965	984	988	585
45°	779	805	831	854	861	602
55°	610	639	680	707	715	544
65°	422	466	512	546	557	419
75°	234	285	342	380	392	249
85°	72	129	191	232	245	75
90°	26	98	168	217	231	22
95°	109	167	234	275	287	113
105°	366	394	451	490	505	389
115°	670	682	722	751	759	661
125°	969	967	1000	1023	1028	864
135°	1245	1254	1264	1282	1286	964
145°	1511	1515	1517	1524	1524	946
155°	1729	1729	1728	1734	1728	796
165°	1882	1878	1875	1884	1878	531
175°	1958	1951	1949	1960	1949	186
180°	1961	1961	1961	1961	1961	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.6	1216.6	1216.6	1216.6	1216.6
2.5°	1222.1	1218.0	1207.1	1216.6	1215.3
5°	1218.0	1213.9	1204.4	1215.3	1213.9
7.5°	1209.8	1207.1	1198.9	1211.2	1209.8
10°	1198.9	1197.6	1190.7	1203.0	1201.6
12.5°	1183.9	1183.9	1179.8	1190.7	1190.7
15°	1167.6	1168.9	1164.9	1177.1	1175.8
17.5°	1145.8	1149.9	1148.5	1160.8	1159.4
20°	1122.6	1126.7	1128.1	1141.7	1141.7
22.5°	1096.7	1102.2	1104.9	1118.5	1121.3
25°	1068.1	1076.3	1080.4	1095.4	1096.7
27.5°	1036.8	1049.1	1054.5	1068.1	1069.5
30°	1005.5	1016.4	1025.9	1040.9	1043.6
32.5°	971.4	985.0	995.9	1013.6	1016.4
35°	934.6	951.0	964.6	983.7	987.7
37.5°	897.8	916.9	933.3	952.3	956.4
40°	862.4	880.1	899.2	919.6	925.1
42.5°	821.5	842.0	865.1	888.3	892.4
45°	779.3	805.2	831.1	854.2	861.0
47.5°	739.8	765.7	795.6	818.8	827.0
50°	696.2	726.2	756.1	783.4	791.6
52.5°	652.6	682.6	718.0	745.2	753.4
55°	610.4	639.0	679.8	707.1	715.3
57.5°	562.7	598.1	637.6	670.3	677.1
60°	516.4	551.8	596.7	628.1	639.0
62.5°	471.4	510.9	555.9	587.2	598.1
65°	422.3	465.9	512.3	546.3	557.2
67.5°	376.0	422.3	471.4	505.5	516.4
70°	328.3	374.7	426.4	463.2	472.8
72.5°	282.0	329.7	385.6	421.0	431.9
75°	234.3	284.7	342.0	380.1	392.4
77.5°	189.4	242.5	302.5	340.6	354.2
80°	148.5	203.0	262.9	303.8	314.7
82.5°	107.6	164.9	224.8	267.0	279.3
85°	72.2	129.4	190.7	231.6	245.2
87.5°	45.0	100.8	160.8	200.3	212.5
90°	26.4	97.5	168.3	216.9	230.8
92.5°	59.8	127.3	193.4	236.2	248.6
95°	108.7	167.4	233.8	275.1	287.4
97.5°	161.9	213.7	281.6	323.1	335.4
100°	227.4	268.8	335.6	375.4	385.0
102.5°	297.1	328.6	392.5	432.5	445.0
105°	365.7	394.4	450.9	489.6	505.0
107.5°	440.0	464.7	513.9	554.0	562.0
110°	514.5	536.6	582.8	611.1	626.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	592.0	608.4	650.2	680.2	691.1
115°	669.5	681.7	722.3	750.8	758.8
117.5°	743.9	752.0	791.3	815.4	821.7
120°	816.8	827.0	861.9	881.6	895.6
122.5°	894.2	895.7	931.0	953.6	955.6
125°	968.6	967.3	999.8	1022.6	1027.8
127.5°	1036.8	1040.1	1064.3	1085.8	1093.8
130°	1108.4	1111.5	1133.3	1154.8	1156.9
132.5°	1182.7	1184.3	1199.2	1219.3	1225.9
135°	1245.0	1254.1	1263.7	1282.5	1286.0
137.5°	1316.3	1319.5	1328.0	1343.8	1352.2
140°	1387.6	1389.3	1390.6	1406.8	1412.1
142.5°	1451.5	1454.5	1451.6	1466.6	1472.0
145°	1510.7	1515.3	1516.8	1523.5	1524.4
147.5°	1571.3	1577.5	1576.0	1575.9	1579.8
150°	1625.9	1630.6	1630.6	1630.6	1629.1
152.5°	1676.1	1679.1	1680.7	1685.2	1680.7
155°	1729.2	1729.2	1727.7	1733.7	1727.7
157.5°	1774.7	1771.7	1771.7	1776.2	1771.7
160°	1814.1	1812.6	1811.1	1815.7	1808.1
162.5°	1850.5	1846.0	1844.5	1853.6	1846.0
165°	1882.4	1877.8	1874.8	1883.9	1877.8
167.5°	1908.2	1902.1	1902.1	1911.2	1902.1
170°	1929.4	1921.8	1923.4	1932.5	1921.8
172.5°	1944.6	1938.5	1938.5	1949.1	1938.5
175°	1958.2	1950.7	1949.1	1959.8	1949.1
177.5°	1964.3	1956.7	1956.7	1967.3	1955.2
180°	1961.3	1961.3	1961.3	1961.3	1961.3

(END OF REPORT)