

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: P1032470

Luminaire Tested: S124DIW-B1020D1050UB2750-4F0-XX-W2A-D_2700K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032470
REPORT IS A COMBINATION OF REPORTS P996637 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1050UB2750-4F0-XX-W2A-D_2700K
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

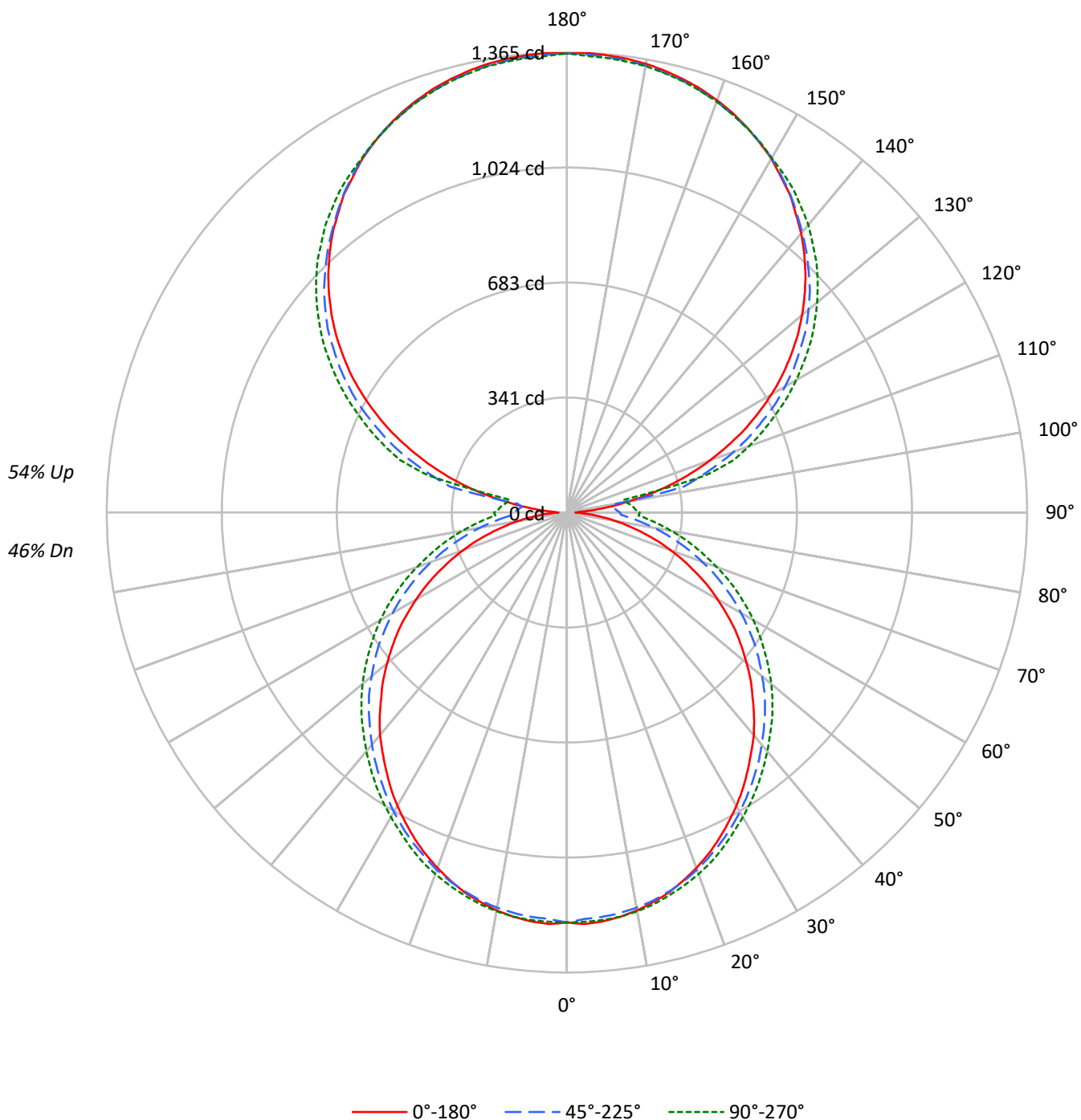
Lumens per Lamp: N/A
Luminaire Lumens: 8365.0 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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	50	30	10
RCR																				
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46		
1	96	91	87	83	88	84	80	77	70	67	65	57	55	53	45	44	42	37		
2	87	79	73	67	79	73	67	62	60	56	53	49	46	44	39	37	35	30		
3	79	69	62	55	72	64	57	52	53	48	44	43	40	36	34	31	29	25		
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21		
5	66	54	46	40	60	50	42	37	42	36	32	34	30	27	27	24	22	18		
6	61	48	40	34	55	45	37	32	37	32	27	31	26	23	25	21	19	16		
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17	14		
8	52	40	32	26	48	37	29	25	31	25	21	25	21	18	20	17	15	12		
9	48	36	28	23	44	33	26	22	28	23	19	23	19	16	19	16	13	11		
10	45	33	26	21	41	31	24	20	26	21	17	22	17	15	17	14	12	10		

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	1.4
10°-20°	330.3	3.9
20°-30°	499.4	6.0
30°-40°	604.2	7.2
40°-50°	638.7	7.6
50°-60°	601.1	7.2
60°-70°	498.8	6.0
70°-80°	350.0	4.2
80°-90°	200.2	2.4
90°-100°	162.7	1.9
100°-110°	384.7	4.6
110°-120°	626.9	7.5
120°-130°	754.6	9.0
130°-140°	786.3	9.4
140°-150°	724.8	8.7
150°-160°	582.2	7.0
160°-170°	375.5	4.5
170°-180°	129.4	1.5
0°-30°	945.0	11.3
0°-40°	1549.1	18.5
0°-60°	2789.0	33.3
0°-90°	3838.0	45.9
90°-120°	1174.3	14.0
90°-150°	3439.9	41.1
90°-180°	4527.0	54.1
0°-180°	8365.0	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°	25	91	157	203	216	18
95°	74	84	141	184	197	83
105°	319	352	408	451	425	335
115°	581	596	638	670	680	572
125°	810	813	845	874	883	724
135°	1001	1000	1014	1037	1048	772
145°	1152	1154	1154	1163	1171	720
155°	1262	1263	1260	1264	1261	582
165°	1331	1326	1326	1334	1325	376
175°	1362	1356	1357	1366	1354	130
180°	1362	1362	1362	1362	1362	

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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°	24.9	90.6	157.3	202.9	215.9
92.5°	35.7	81.3	148.1	192.4	203.3
95°	73.7	84.1	140.9	183.8	197.1
97.5°	123.3	185.3	134.1	174.6	187.9
100°	182.1	235.8	148.3	167.8	178.4
102.5°	249.3	291.5	355.4	161.7	172.6
105°	318.9	352.2	407.7	451.0	425.2
107.5°	385.1	411.3	466.1	505.3	518.9
110°	450.9	473.1	526.9	560.2	574.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	514.7	537.2	584.2	613.2	628.1
115°	580.7	595.9	638.5	670.5	680.0
117.5°	640.8	652.9	696.9	724.5	735.4
120°	700.5	708.7	747.1	776.5	785.3
122.5°	757.5	759.6	798.4	826.6	834.2
125°	810.1	812.9	844.8	873.8	883.0
127.5°	862.1	861.8	894.1	917.7	926.1
130°	910.7	910.3	935.1	960.7	968.9
132.5°	956.5	957.1	977.6	1001.7	1008.9
135°	1000.9	999.9	1013.6	1037.4	1047.6
137.5°	1041.7	1040.4	1050.9	1073.3	1079.2
140°	1081.4	1082.2	1085.5	1106.3	1114.1
142.5°	1115.8	1119.8	1119.5	1136.5	1141.9
145°	1152.4	1154.1	1154.1	1163.3	1170.8
147.5°	1181.0	1185.7	1184.7	1187.1	1193.5
150°	1212.5	1215.2	1214.2	1214.2	1215.2
152.5°	1237.6	1240.7	1238.6	1240.7	1239.7
155°	1262.1	1263.1	1260.0	1264.1	1261.1
157.5°	1283.5	1283.5	1279.4	1284.5	1279.4
160°	1301.8	1298.7	1297.7	1303.8	1297.7
162.5°	1318.1	1314.0	1313.0	1319.1	1312.0
165°	1331.3	1326.2	1326.2	1334.4	1325.2
167.5°	1342.5	1337.4	1336.4	1345.6	1335.4
170°	1351.7	1345.6	1346.6	1354.8	1344.6
172.5°	1357.8	1351.7	1352.7	1360.9	1349.7
175°	1361.9	1355.8	1356.8	1366.0	1353.7
177.5°	1365.0	1357.8	1359.9	1368.0	1355.8
180°	1361.9	1361.9	1361.9	1361.9	1361.9

(END OF REPORT)