

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: P1024807

Luminaire Tested: S124DIP-B1020D1035UB27-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024807
REPORT IS A COMBINATION OF REPORTS P995122 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

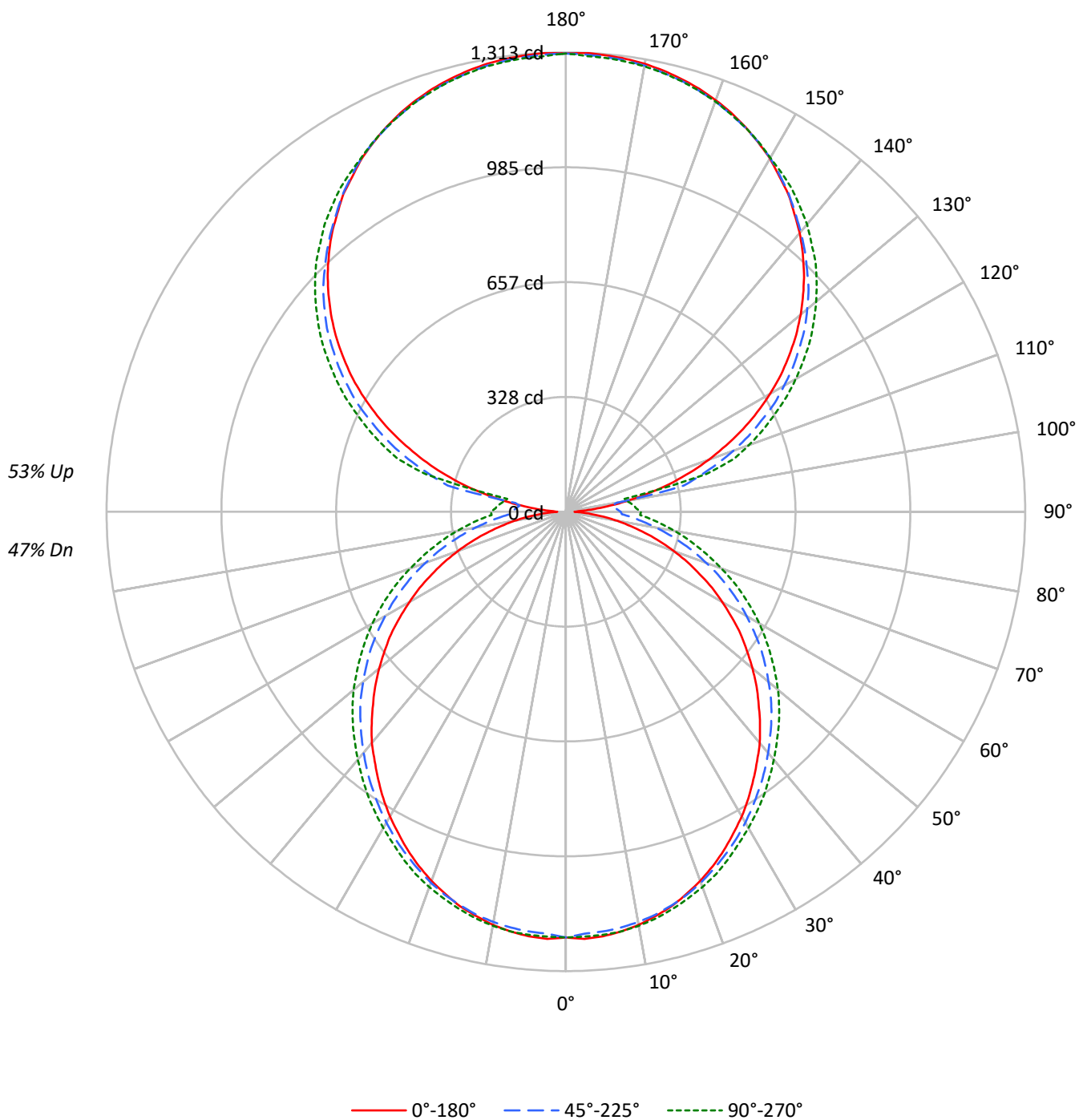
Lumens per Lamp: N/A
Luminaire Lumens: 8204.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
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
RCR																	
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53
1	96	91	87	83	88	84	80	77	70	67	65	57	55	54	45	44	43
2	87	79	73	67	80	73	67	62	61	57	53	50	47	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	44	40	37	35	32	30
4	72	61	53	47	66	56	49	43	47	42	37	39	35	31	31	28	25
5	66	54	46	40	60	50	43	37	42	36	32	35	30	27	28	24	22
6	61	49	40	34	56	45	37	32	38	32	28	31	27	23	25	22	19
7	56	44	36	30	51	40	33	28	34	28	24	28	24	21	23	19	17
8	52	40	32	26	48	37	30	25	31	25	21	26	21	18	21	18	15
9	48	36	28	23	44	33	27	22	28	23	19	24	19	16	19	16	14
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	18	15	12

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	4.0
20°-30°	499.4	6.1
30°-40°	604.2	7.4
40°-50°	638.7	7.8
50°-60°	601.1	7.3
60°-70°	498.8	6.1
70°-80°	350.0	4.3
80°-90°	200.0	2.4
90°-100°	161.0	2.0
100°-110°	373.4	4.6
110°-120°	605.2	7.4
120°-130°	727.0	8.9
130°-140°	756.8	9.2
140°-150°	697.2	8.5
150°-160°	560.0	6.8
160°-170°	361.1	4.4
170°-180°	124.5	1.5
0°-30°	945.0	11.5
0°-40°	1549.1	18.9
0°-60°	2789.0	34.0
0°-90°	3837.9	46.8
90°-120°	1139.5	13.9
90°-150°	3320.5	40.5
90°-180°	4366.0	53.2
0°-180°	8204.0	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	90	156	202	215	18
95°	72	83	140	183	196	81
105°	307	340	396	438	414	323
115°	559	574	617	648	658	551
125°	779	782	814	843	852	696
135°	963	962	975	999	1009	742
145°	1108	1110	1110	1119	1127	693
155°	1214	1215	1212	1216	1213	560
165°	1280	1276	1276	1283	1275	362
175°	1310	1304	1305	1314	1302	125
180°	1310	1310	1310	1310	1310	

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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°	24.7	90.0	156.5	201.8	214.7
92.5°	35.1	80.8	147.3	191.4	202.3
95°	71.6	83.3	140.1	182.7	196.0
97.5°	119.2	180.3	133.3	173.6	186.8
100°	175.7	228.7	146.6	166.8	177.3
102.5°	240.3	282.1	345.6	160.6	171.5
105°	307.2	340.3	395.6	438.5	414.1
107.5°	370.9	396.9	451.5	490.5	503.9
110°	434.1	456.2	509.8	543.0	556.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	495.4	517.7	564.6	593.6	608.4
115°	558.8	573.9	616.6	648.5	658.0
117.5°	616.6	628.6	672.5	700.1	711.0
120°	674.0	682.0	720.5	749.8	758.7
122.5°	728.9	730.8	769.6	797.8	805.4
125°	779.4	782.0	814.0	842.9	852.1
127.5°	829.4	829.0	861.1	884.8	893.3
130°	876.1	875.6	900.4	925.9	934.1
132.5°	920.1	920.7	941.0	965.1	972.3
135°	962.8	961.9	975.4	999.1	1009.2
137.5°	1002.0	1000.7	1011.0	1033.4	1039.3
140°	1040.2	1040.9	1044.2	1064.8	1072.6
142.5°	1073.2	1077.1	1076.7	1093.7	1099.1
145°	1108.5	1110.0	1110.0	1119.2	1126.6
147.5°	1135.9	1140.4	1139.4	1141.8	1148.2
150°	1166.3	1168.8	1167.8	1167.8	1168.8
152.5°	1190.4	1193.3	1191.4	1193.3	1192.3
155°	1213.9	1214.9	1211.9	1215.8	1212.9
157.5°	1234.5	1234.5	1230.5	1235.4	1230.5
160°	1252.1	1249.2	1248.2	1254.1	1248.2
162.5°	1267.8	1263.9	1262.9	1268.8	1261.9
165°	1280.5	1275.6	1275.6	1283.4	1274.6
167.5°	1291.3	1286.4	1285.4	1294.2	1284.4
170°	1300.1	1294.2	1295.2	1303.0	1293.2
172.5°	1306.0	1300.1	1301.1	1308.9	1298.1
175°	1309.9	1304.0	1305.0	1313.8	1302.1
177.5°	1312.8	1306.0	1307.9	1315.8	1304.0
180°	1309.9	1309.9	1309.9	1309.9	1309.9

(END OF REPORT)