

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: P1024834

Luminaire Tested: S124DIP-B1020D1035UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024834
REPORT IS A COMBINATION OF REPORTS P995164 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

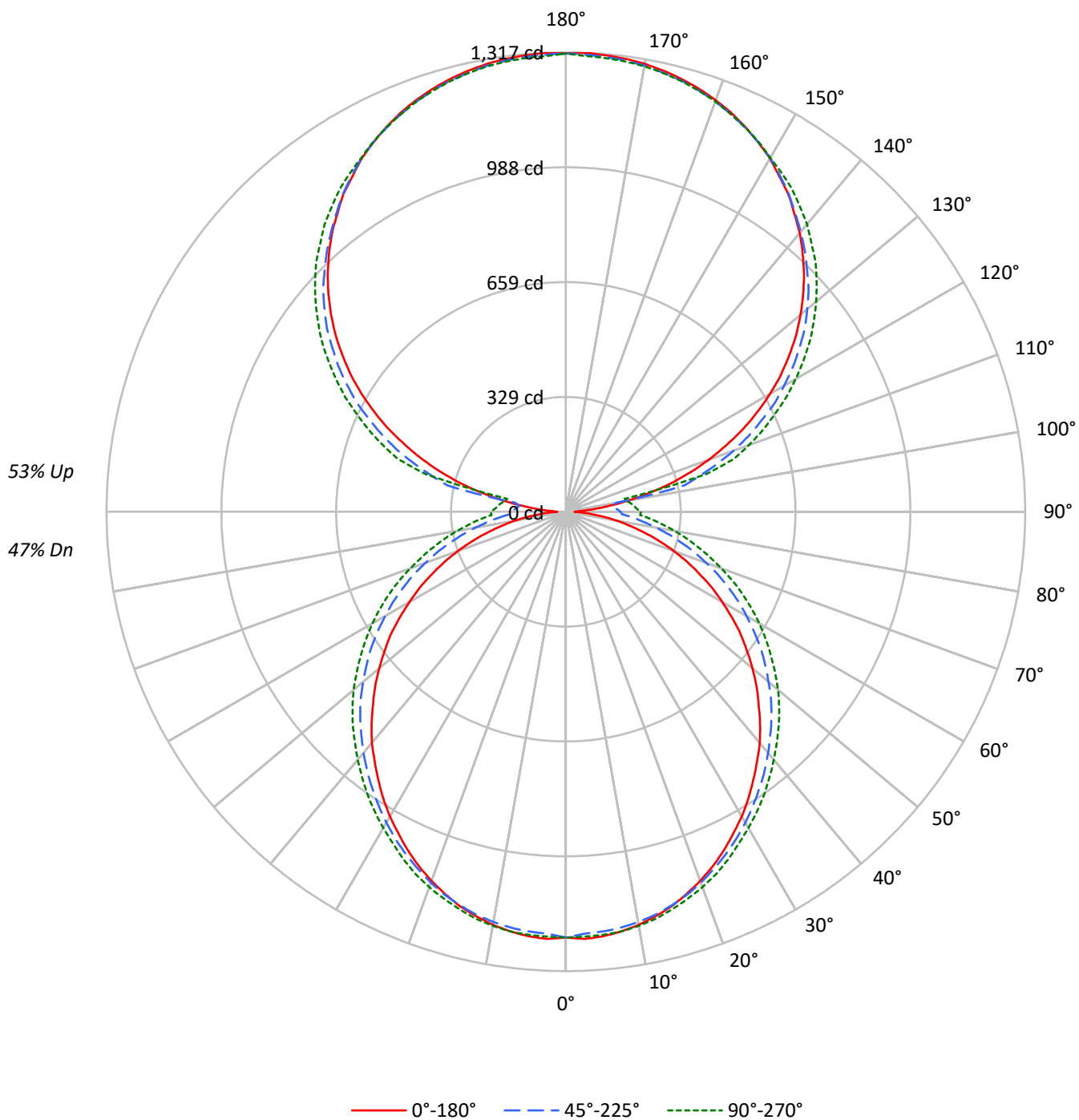
Lumens per Lamp: N/A
Luminaire Lumens: 8229.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
Input Voltage (V):
Input Current (A_{in}): 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

TEST NUMBER: P1024834

CATALOG NUMBER: S124DIP-B1020D1035UB40-4F0-XX-W2A-D

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9952	9952	9952
5°	9979	9692	9710
10°	9915	9502	9475
15°	9822	9287	9209
20°	9684	9055	8951
25°	9530	8800	8673
30°	9362	8546	8390
35°	9172	8286	8137
40°	9020	8037	7876
45°	8795	7804	7644
50°	8604	7539	7400
55°	8405	7283	7120
60°	8097	6965	6856
65°	7759	6622	6538
70°	7349	6230	6169
75°	6775	5792	5820
80°	6128	5350	5453
85°	5268	4902	5156

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8795 cd/sqm

TEST NUMBER: P1024834

CATALOG NUMBER: S124DIP-B1020D1035UB40-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	1.4
10°-20°	331.3	4.0
20°-30°	501.0	6.1
30°-40°	606.1	7.4
40°-50°	640.7	7.8
50°-60°	603.0	7.3
60°-70°	500.4	6.1
70°-80°	351.1	4.3
80°-90°	200.7	2.4
90°-100°	161.5	2.0
100°-110°	374.5	4.6
110°-120°	607.0	7.4
120°-130°	729.2	8.9
130°-140°	759.1	9.2
140°-150°	699.3	8.5
150°-160°	561.6	6.8
160°-170°	362.2	4.4
170°-180°	124.8	1.5
0°-30°	947.9	11.5
0°-40°	1554.0	18.9
0°-60°	2797.7	34.0
0°-90°	3849.9	46.8
90°-120°	1142.9	13.9
90°-150°	3330.4	40.5
90°-180°	4379.0	53.2
0°-180°	8229.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1222	1218	1208	1219	1218	116
15°	1171	1173	1168	1181	1179	330
25°	1072	1080	1084	1099	1100	494
35°	938	954	968	987	991	587
45°	782	808	834	857	864	604
55°	612	641	682	709	718	546
65°	424	467	514	548	559	420
75°	235	286	343	381	394	250
85°	72	130	191	232	246	75
90°	25	90	157	202	215	18
95°	72	84	140	183	197	81
105°	308	341	397	440	415	323
115°	560	576	618	650	660	552
125°	782	784	816	845	855	699
135°	966	965	978	1002	1012	745
145°	1112	1113	1113	1122	1130	695
155°	1218	1218	1216	1219	1216	561
165°	1284	1279	1279	1287	1278	363
175°	1314	1308	1309	1318	1306	125
180°	1314	1314	1314	1314	1314	

TEST NUMBER: P1024834

CATALOG NUMBER: S124DIP-B1020D1035UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1220.4	1220.4	1220.4	1220.4	1220.4
2.5°	1225.9	1221.8	1210.9	1220.4	1219.1
5°	1221.8	1217.7	1208.1	1219.1	1217.7
7.5°	1213.6	1210.9	1202.7	1215.0	1213.6
10°	1202.7	1201.3	1194.5	1206.8	1205.4
12.5°	1187.6	1187.6	1183.5	1194.5	1194.5
15°	1171.2	1172.6	1168.5	1180.8	1179.4
17.5°	1149.4	1153.5	1152.1	1164.4	1163.0
20°	1126.1	1130.2	1131.6	1145.3	1145.3
22.5°	1100.2	1105.6	1108.4	1122.0	1124.8
25°	1071.5	1079.7	1083.8	1098.8	1100.2
27.5°	1040.0	1052.3	1057.8	1071.5	1072.8
30°	1008.6	1019.5	1029.1	1044.1	1046.9
32.5°	974.4	988.1	999.0	1016.8	1019.5
35°	937.5	953.9	967.6	986.7	990.8
37.5°	900.6	919.8	936.2	955.3	959.4
40°	865.1	882.9	902.0	922.5	928.0
42.5°	824.1	844.6	867.8	891.1	895.2
45°	781.7	807.7	833.7	856.9	863.7
47.5°	742.1	768.1	798.1	821.4	829.6
50°	698.4	728.4	758.5	785.8	794.0
52.5°	654.6	684.7	720.2	747.6	755.8
55°	612.3	641.0	682.0	709.3	717.5
57.5°	564.4	600.0	639.6	672.4	679.2
60°	518.0	553.5	598.6	630.0	641.0
62.5°	472.9	512.5	557.6	589.0	600.0
65°	423.7	467.4	513.9	548.0	559.0
67.5°	377.2	423.7	472.9	507.0	518.0
70°	329.4	375.8	427.8	464.7	474.2
72.5°	282.9	330.7	386.8	422.3	433.2
75°	235.1	285.6	343.0	381.3	393.6
77.5°	190.0	243.3	303.4	341.7	355.3
80°	149.0	203.6	263.8	304.8	315.7
82.5°	108.0	165.4	225.5	267.9	280.2
85°	72.4	129.8	191.3	232.3	246.0
87.5°	45.1	101.1	161.3	200.9	213.2
90°	24.8	90.3	156.9	202.4	215.4
92.5°	35.2	81.1	147.7	191.9	202.8
95°	71.8	83.5	140.5	183.3	196.6
97.5°	119.6	180.8	133.7	174.1	187.4
100°	176.2	229.4	147.1	167.3	177.8
102.5°	241.0	282.9	346.6	161.1	172.0
105°	308.1	341.3	396.8	439.8	415.3
107.5°	371.9	398.1	452.9	491.9	505.4
110°	435.4	457.5	511.2	544.6	558.6

TEST NUMBER: P1024834

CATALOG NUMBER: S124DIP-B1020D1035UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	497.0	519.3	566.3	595.4	610.3
115°	560.4	575.7	618.4	650.5	660.1
117.5°	618.4	630.5	674.5	702.2	713.1
120°	676.0	684.0	722.7	752.0	760.9
122.5°	731.0	733.0	771.8	800.2	807.7
125°	781.8	784.3	816.5	845.4	854.6
127.5°	831.9	831.5	863.7	887.3	895.9
130°	878.6	878.2	903.1	928.7	936.9
132.5°	922.9	923.4	943.8	968.0	975.3
135°	965.7	964.7	978.2	1002.1	1012.3
137.5°	1005.0	1003.7	1014.0	1036.5	1042.4
140°	1043.3	1044.0	1047.2	1068.0	1075.8
142.5°	1076.4	1080.3	1079.9	1096.9	1102.4
145°	1111.8	1113.3	1113.3	1122.5	1130.0
147.5°	1139.3	1143.8	1142.8	1145.2	1151.6
150°	1169.7	1172.3	1171.3	1171.3	1172.3
152.5°	1193.9	1196.8	1194.9	1196.8	1195.9
155°	1217.5	1218.5	1215.5	1219.4	1216.5
157.5°	1238.1	1238.1	1234.2	1239.1	1234.2
160°	1255.8	1252.9	1251.9	1257.8	1251.9
162.5°	1271.5	1267.6	1266.6	1272.5	1265.6
165°	1284.3	1279.4	1279.4	1287.2	1278.4
167.5°	1295.1	1290.2	1289.2	1298.1	1288.2
170°	1303.9	1298.1	1299.0	1306.9	1297.1
172.5°	1309.8	1303.9	1304.9	1312.8	1302.0
175°	1313.8	1307.9	1308.9	1317.7	1305.9
177.5°	1316.7	1309.8	1311.8	1319.7	1307.9
180°	1313.8	1313.8	1313.8	1313.8	1313.8

(END OF REPORT)