

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: P1024844

Luminaire Tested: S124DIP-B1020D1035UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024844
REPORT IS A COMBINATION OF REPORTS P995174 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

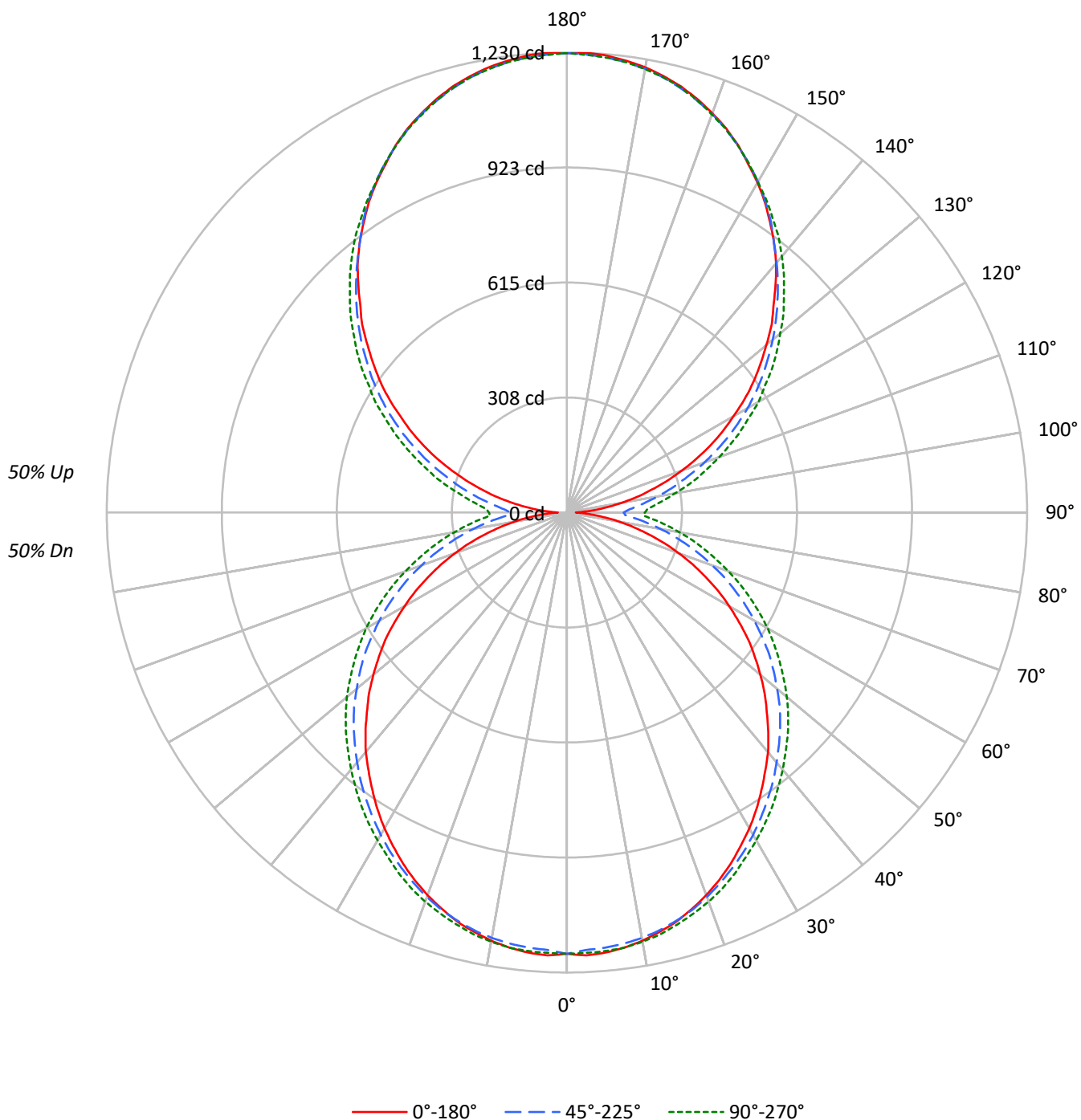
Lumens per Lamp: N/A
Luminaire Lumens: 7434.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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
RCR																	
0	107	107	107	107	99	99	99	99	83	83	83		69	69	69		56
1	97	92	88	84	89	85	81	78	72	69	66		59	57	56		48
2	88	80	73	68	80	74	68	63	62	58	54		51	48	46		42
3	80	70	62	56	73	64	58	52	54	49	45		45	41	38		37
4	73	61	53	47	67	57	50	44	48	42	38		40	36	32		32
5	67	55	46	40	61	51	43	37	43	37	33		36	31	28		29
6	61	49	40	34	56	45	38	32	39	33	28		32	28	24		26
7	57	44	36	30	52	41	34	28	35	29	25		29	25	21		24
8	53	40	32	26	48	37	30	25	32	26	22		27	22	19		22
9	49	36	29	24	45	34	27	22	29	23	20		25	20	17		20
10	46	33	26	21	42	31	24	20	27	21	18		23	18	15		19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9622	9622	9622
5°	9649	9371	9388
10°	9586	9187	9160
15°	9496	8980	8904
20°	9363	8755	8654
25°	9213	8507	8386
30°	9052	8262	8112
35°	8868	8012	7867
40°	8720	7771	7614
45°	8503	7545	7391
50°	8318	7289	7155
55°	8126	7042	6883
60°	7829	6734	6628
65°	7501	6402	6320
70°	7103	6023	5965
75°	6550	5602	5627
80°	5923	5172	5272
85°	5094	4741	4985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	1.5
10°-20°	320.3	4.3
20°-30°	484.4	6.5
30°-40°	586.0	7.9
40°-50°	619.5	8.3
50°-60°	583.0	7.8
60°-70°	483.8	6.5
70°-80°	339.5	4.6
80°-90°	194.0	2.6
90°-100°	194.0	2.6
100°-110°	324.2	4.4
110°-120°	464.0	6.2
120°-130°	569.2	7.7
130°-140°	617.3	8.3
140°-150°	595.9	8.0
150°-160°	498.9	6.7
160°-170°	332.0	4.5
170°-180°	116.2	1.6
0°-30°	916.5	12.3
0°-40°	1502.5	20.2
0°-60°	2705.0	36.4
0°-90°	3722.3	50.1
90°-120°	982.3	13.2
90°-150°	2764.7	37.2
90°-180°	3712.0	49.9
0°-180°	7434.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1181	1177	1168	1179	1177	112
15°	1132	1134	1130	1142	1140	319
25°	1036	1044	1048	1062	1064	477
35°	906	922	936	954	958	568
45°	756	781	806	828	835	584
55°	592	620	659	686	694	528
65°	410	452	497	530	540	406
75°	227	276	332	369	381	241
85°	70	126	185	225	238	73
90°	24	87	152	196	208	19
95°	74	126	187	226	238	75
105°	233	261	313	349	363	248
115°	422	434	474	503	511	417
125°	609	607	639	662	668	543
135°	781	786	796	815	820	604
145°	947	949	950	957	959	593
155°	1083	1083	1082	1086	1082	498
165°	1179	1176	1174	1180	1176	332
175°	1226	1222	1221	1228	1221	116
180°	1228	1228	1228	1228	1228	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1185.3	1181.3	1170.7	1180.0	1178.6
5°	1181.3	1177.3	1168.1	1178.6	1177.3
7.5°	1173.4	1170.7	1162.8	1174.7	1173.4
10°	1162.8	1161.5	1154.9	1166.8	1165.4
12.5°	1148.3	1148.3	1144.3	1154.9	1154.9
15°	1132.4	1133.7	1129.8	1141.7	1140.3
17.5°	1111.3	1115.2	1113.9	1125.8	1124.5
20°	1088.8	1092.8	1094.1	1107.3	1107.3
22.5°	1063.7	1069.0	1071.6	1084.8	1087.5
25°	1035.9	1043.9	1047.8	1062.4	1063.7
27.5°	1005.6	1017.4	1022.7	1035.9	1037.3
30°	975.2	985.7	995.0	1009.5	1012.2
32.5°	942.1	955.3	965.9	983.1	985.7
35°	906.4	922.3	935.5	954.0	958.0
37.5°	870.8	889.3	905.1	923.6	927.6
40°	836.4	853.6	872.1	891.9	897.2
42.5°	796.8	816.6	839.1	861.5	865.5
45°	755.8	780.9	806.0	828.5	835.1
47.5°	717.5	742.6	771.7	794.1	802.1
50°	675.2	704.3	733.4	759.8	767.7
52.5°	632.9	662.0	696.4	722.8	730.7
55°	592.0	619.7	659.4	685.8	693.7
57.5°	545.7	580.1	618.4	650.1	656.7
60°	500.8	535.1	578.8	609.1	619.7
62.5°	457.2	495.5	539.1	569.5	580.1
65°	409.6	451.9	496.8	529.9	540.4
67.5°	364.7	409.6	457.2	490.2	500.8
70°	318.4	363.4	413.6	449.3	458.5
72.5°	273.5	319.8	373.9	408.3	418.9
75°	227.3	276.2	331.7	368.7	380.6
77.5°	183.7	235.2	293.3	330.3	343.6
80°	144.0	196.9	255.0	294.7	305.2
82.5°	104.4	159.9	218.0	259.0	270.9
85°	70.0	125.5	185.0	224.6	237.8
87.5°	43.6	97.8	155.9	194.2	206.1
90°	24.0	87.3	151.7	195.7	208.2
92.5°	44.5	103.2	164.7	204.6	216.1
95°	74.2	126.4	187.2	225.7	237.6
97.5°	107.1	153.0	214.8	252.9	264.8
100°	147.5	185.7	245.8	283.4	292.6
102.5°	191.2	221.3	279.1	316.3	327.8
105°	233.3	260.6	313.3	349.2	362.6
107.5°	279.8	303.3	350.4	387.2	395.6
110°	326.0	346.4	391.7	420.2	433.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	374.0	389.9	431.6	460.7	471.3
115°	422.1	434.0	474.4	502.6	510.8
117.5°	468.7	476.7	515.3	540.2	547.9
120°	513.9	521.7	557.2	578.8	591.3
122.5°	562.4	563.3	598.1	621.6	626.2
125°	608.6	607.3	639.3	662.5	668.5
127.5°	651.3	652.9	677.4	699.3	707.5
130°	695.6	697.1	718.3	740.2	744.3
132.5°	742.2	742.7	757.6	778.2	785.2
135°	780.7	786.4	795.7	814.9	820.0
137.5°	825.3	826.9	834.1	851.0	858.6
140°	870.0	870.6	871.9	888.1	893.8
142.5°	909.5	911.4	909.2	923.7	929.0
145°	946.6	949.1	950.0	957.0	959.4
147.5°	984.6	988.0	987.1	987.4	991.8
150°	1018.8	1021.3	1021.3	1021.3	1020.3
152.5°	1049.8	1051.7	1052.6	1055.5	1052.6
155°	1083.0	1083.0	1082.1	1085.9	1082.1
157.5°	1111.6	1109.7	1109.7	1112.5	1109.7
160°	1136.3	1135.3	1134.4	1137.2	1132.5
162.5°	1159.1	1156.2	1155.3	1161.0	1156.2
165°	1179.0	1176.2	1174.3	1180.0	1176.2
167.5°	1195.2	1191.4	1191.4	1197.1	1191.4
170°	1208.5	1203.7	1204.7	1210.4	1203.7
172.5°	1218.0	1214.2	1214.2	1220.8	1214.2
175°	1226.5	1221.8	1220.8	1227.5	1220.8
177.5°	1230.3	1225.6	1225.6	1232.2	1224.6
180°	1228.4	1228.4	1228.4	1228.4	1228.4

(END OF REPORT)