

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: P1024843

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024843
REPORT IS A COMBINATION OF REPORTS P995173 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-D
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

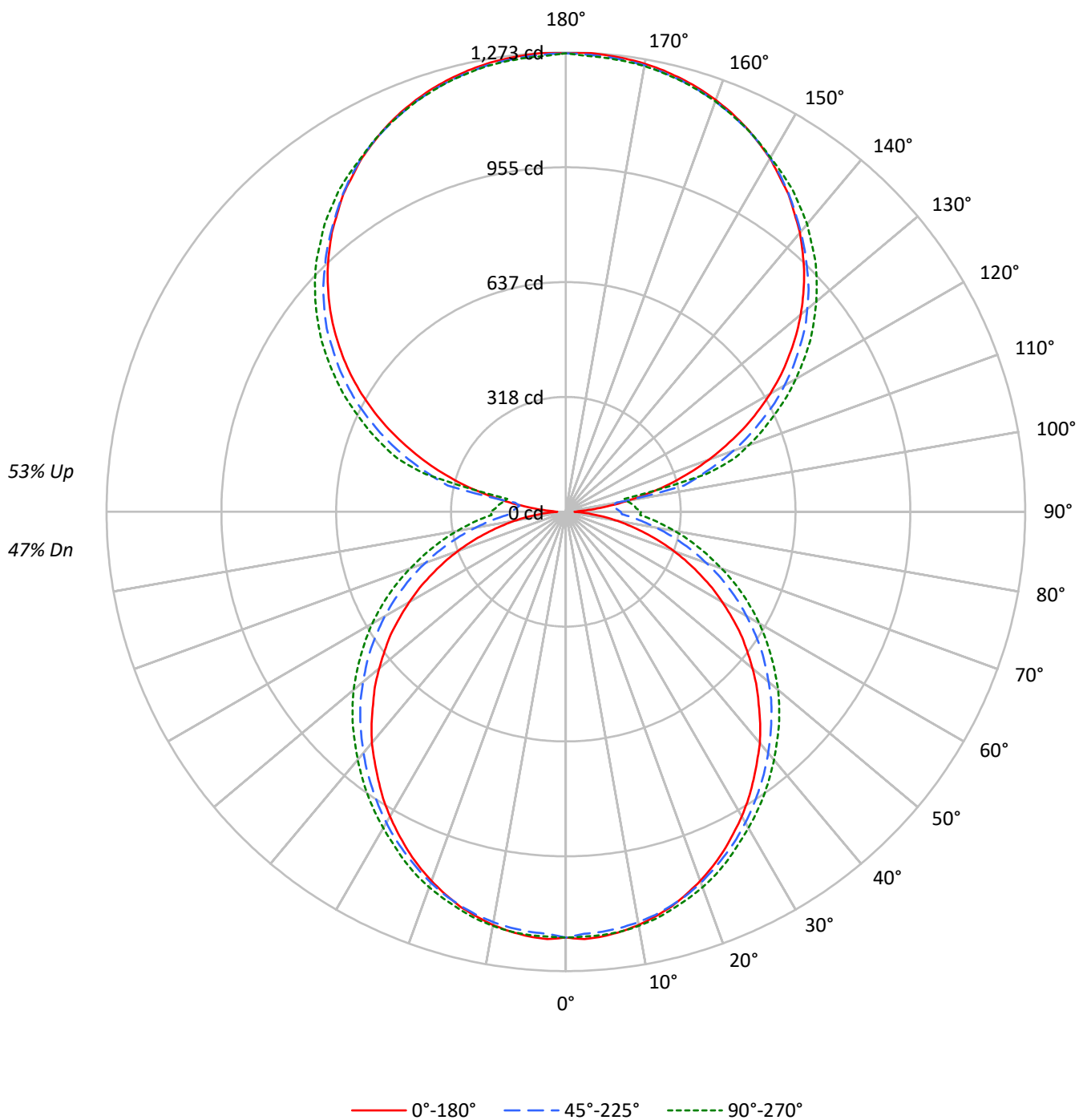
Lumens per Lamp: N/A
Luminaire Lumens: 7957.0 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	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°	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	1.4
10°-20°	320.3	4.0
20°-30°	484.4	6.1
30°-40°	586.0	7.4
40°-50°	619.5	7.8
50°-60°	583.0	7.3
60°-70°	483.8	6.1
70°-80°	339.5	4.3
80°-90°	194.0	2.4
90°-100°	156.1	2.0
100°-110°	362.1	4.6
110°-120°	587.0	7.4
120°-130°	705.2	8.9
130°-140°	734.0	9.2
140°-150°	676.2	8.5
150°-160°	543.1	6.8
160°-170°	350.3	4.4
170°-180°	120.7	1.5
0°-30°	916.5	11.5
0°-40°	1502.5	18.9
0°-60°	2705.0	34.0
0°-90°	3722.3	46.8
90°-120°	1105.2	13.9
90°-150°	3220.6	40.5
90°-180°	4235.0	53.2
0°-180°	7957.0	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	17
95°	70	81	136	177	190	78
105°	298	330	384	425	402	313
115°	542	557	598	629	638	534
125°	756	758	790	818	826	675
135°	934	933	946	969	979	720
145°	1075	1077	1077	1086	1093	672
155°	1177	1178	1176	1179	1176	543
165°	1242	1237	1237	1245	1236	351
175°	1270	1265	1266	1274	1263	121
180°	1270	1270	1270	1270	1270	

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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°	34.1	78.5	142.9	185.6	196.2
95°	69.5	80.8	135.9	177.2	190.1
97.5°	115.7	174.9	129.3	168.4	181.2
100°	170.3	221.8	142.2	161.8	171.9
102.5°	233.1	273.6	335.2	155.8	166.3
105°	297.9	330.0	383.7	425.2	401.6
107.5°	359.7	385.0	437.9	475.6	488.8
110°	421.1	442.5	494.4	526.7	540.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	480.5	502.1	547.6	575.8	590.2
115°	541.9	556.7	598.0	629.0	638.2
117.5°	598.0	609.8	652.3	679.0	689.6
120°	653.7	661.5	698.9	727.2	735.9
122.5°	706.9	708.8	746.4	773.8	781.2
125°	756.0	758.5	789.6	817.6	826.4
127.5°	804.5	804.1	835.3	858.1	866.4
130°	849.7	849.3	873.3	898.1	906.0
132.5°	892.5	893.0	912.7	936.1	943.1
135°	933.9	932.9	946.0	969.0	978.9
137.5°	971.9	970.6	980.6	1002.3	1008.0
140°	1008.9	1009.5	1012.7	1032.8	1040.3
142.5°	1040.9	1044.7	1044.3	1060.7	1066.0
145°	1075.1	1076.6	1076.6	1085.5	1092.7
147.5°	1101.7	1106.1	1105.2	1107.4	1113.7
150°	1131.2	1133.7	1132.7	1132.7	1133.7
152.5°	1154.6	1157.4	1155.5	1157.4	1156.5
155°	1177.4	1178.3	1175.5	1179.3	1176.4
157.5°	1197.3	1197.3	1193.5	1198.3	1193.5
160°	1214.4	1211.6	1210.6	1216.3	1210.6
162.5°	1229.6	1225.8	1224.9	1230.6	1223.9
165°	1242.0	1237.2	1237.2	1244.8	1236.3
167.5°	1252.4	1247.7	1246.7	1255.3	1245.8
170°	1261.0	1255.3	1256.2	1263.8	1254.3
172.5°	1266.7	1261.0	1261.9	1269.6	1259.1
175°	1270.5	1264.8	1265.7	1274.3	1262.9
177.5°	1273.4	1266.7	1268.6	1276.2	1264.8
180°	1270.5	1270.5	1270.5	1270.5	1270.5

(END OF REPORT)