

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: P1025023

Luminaire Tested: S124DIP-B1020D810UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025023
REPORT IS A COMBINATION OF REPORTS P995413 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D810UB50-4F0-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

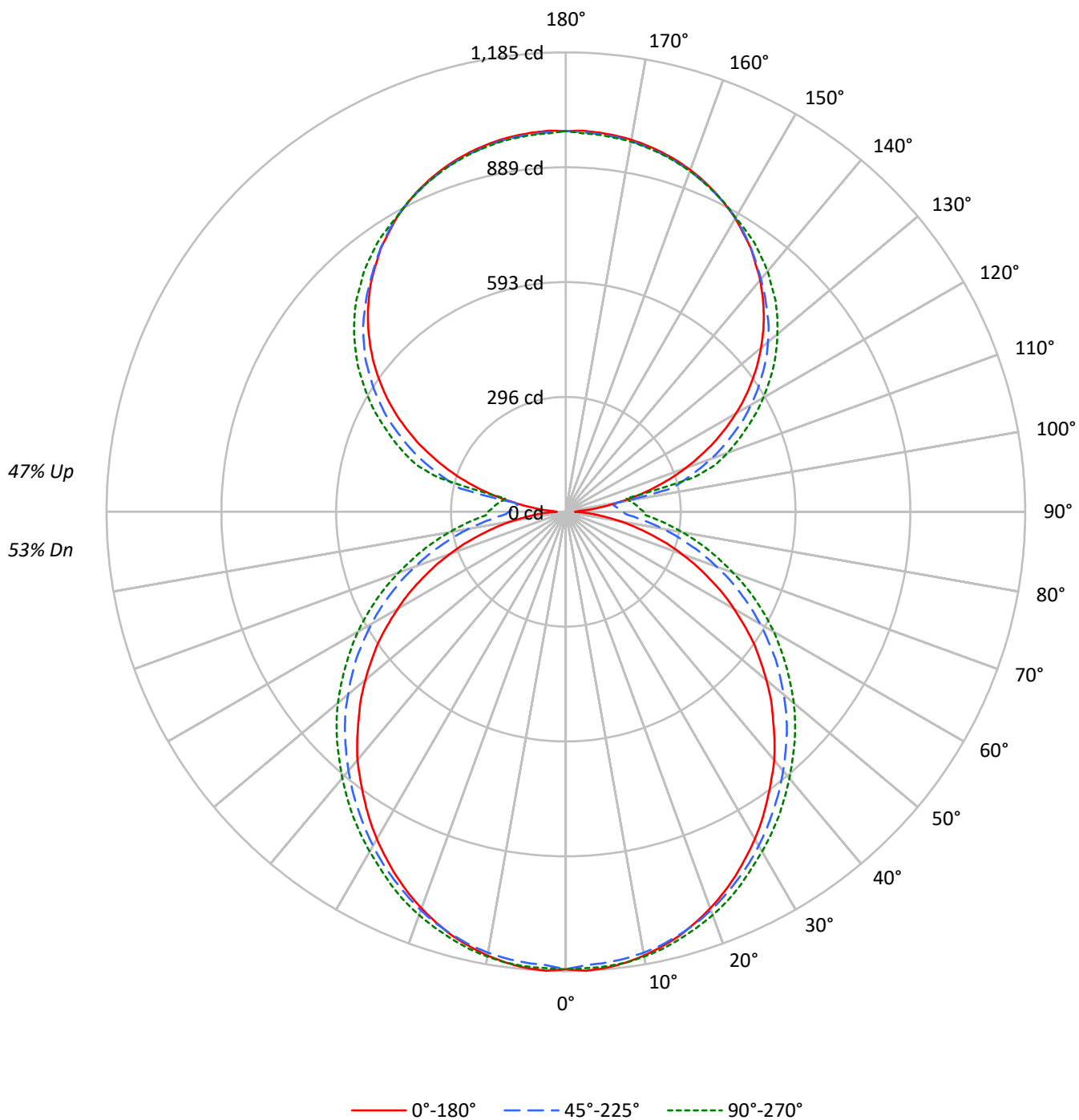
Lumens per Lamp: N/A
Luminaire Lumens: 7063.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.9
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	108	108	108	108	100	100	100	100	85	85	85		71	71	71		59
1	97	93	88	84	90	86	82	79	73	70	67		61	59	57		50
2	88	80	74	68	81	74	68	64	63	59	55		53	50	47		43
3	80	70	62	56	74	65	58	53	55	50	46		46	42	39		38
4	73	62	53	47	67	57	50	44	49	43	39		41	37	33		34
5	67	55	46	40	62	51	43	38	44	38	33		37	32	29		30
6	62	49	41	35	57	46	38	33	39	33	29		33	28	25		27
7	57	44	36	30	52	41	34	29	35	30	25		30	25	22		25
8	53	40	32	27	49	37	30	25	32	26	22		27	23	19		23
9	49	37	29	24	45	34	27	22	30	24	20		25	21	17		21
10	46	34	26	21	42	31	25	20	27	22	18		23	19	16		20

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	1.6
10°-20°	320.3	4.5
20°-30°	484.4	6.9
30°-40°	586.0	8.3
40°-50°	619.5	8.8
50°-60°	583.0	8.3
60°-70°	483.8	6.8
70°-80°	339.5	4.8
80°-90°	193.4	2.7
90°-100°	146.5	2.1
100°-110°	299.0	4.2
110°-120°	466.5	6.6
120°-130°	552.2	7.8
130°-140°	570.4	8.1
140°-150°	523.2	7.4
150°-160°	419.7	5.9
160°-170°	270.7	3.8
170°-180°	93.3	1.3
0°-30°	916.5	13.0
0°-40°	1502.5	21.3
0°-60°	2705.0	38.3
0°-90°	3721.7	52.7
90°-120°	912.0	12.9
90°-150°	2557.7	36.2
90°-180°	3341.0	47.3
0°-180°	7063.0	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°	23	84	147	190	202	17
95°	58	76	131	171	184	63
105°	233	264	316	356	340	245
115°	421	435	476	507	516	415
125°	585	587	619	646	654	523
135°	722	722	734	756	766	557
145°	831	832	832	841	847	519
155°	910	911	908	911	909	420
165°	960	956	956	962	955	271
175°	982	977	978	985	976	93
180°	982	982	982	982	982	

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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°	23.3	84.3	147.0	189.7	201.7
92.5°	30.8	75.6	138.3	179.7	190.3
95°	57.6	76.2	131.2	171.2	183.8
97.5°	93.0	147.5	124.6	162.5	175.2
100°	134.9	182.5	132.7	155.9	165.9
102.5°	183.4	221.3	280.3	149.5	160.0
105°	232.9	263.7	316.3	355.9	340.1
107.5°	280.7	305.4	356.7	393.4	405.6
110°	327.8	348.5	399.1	431.0	443.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	373.4	393.7	438.8	467.2	480.7
115°	420.6	434.7	476.3	506.8	516.0
117.5°	463.9	474.8	516.7	543.6	554.2
120°	506.7	513.6	551.2	579.0	588.2
122.5°	547.8	549.3	586.4	613.6	621.4
125°	585.4	587.0	618.6	645.9	654.5
127.5°	622.9	622.3	652.4	675.4	683.9
130°	657.5	656.9	680.3	704.8	712.7
132.5°	690.6	690.7	709.5	732.7	739.9
135°	722.2	721.5	733.7	756.3	765.8
137.5°	751.6	750.3	759.3	780.5	786.4
140°	780.2	780.4	783.2	802.6	809.9
142.5°	804.6	807.6	807.0	823.0	828.3
145°	831.1	832.0	832.0	840.6	847.4
147.5°	851.6	854.7	854.0	856.0	862.1
150°	874.4	876.0	875.3	875.3	876.0
152.5°	892.2	894.4	892.9	894.4	893.7
155°	909.8	910.6	908.3	911.3	909.1
157.5°	925.2	925.2	922.3	926.0	922.3
160°	938.5	936.3	935.5	939.9	935.5
162.5°	950.2	947.3	946.5	950.9	945.8
165°	959.8	956.1	956.1	962.0	955.3
167.5°	967.8	964.2	963.4	970.0	962.7
170°	974.4	970.0	970.8	976.6	969.3
172.5°	978.8	974.4	975.2	981.0	973.0
175°	981.8	977.4	978.1	984.7	975.9
177.5°	984.0	978.8	980.3	986.2	977.4
180°	981.8	981.8	981.8	981.8	981.8

(END OF REPORT)