

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: P1024953

Luminaire Tested: S124DIP-B1020D590UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024953
REPORT IS A COMBINATION OF REPORTS P995328 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D590UB30-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

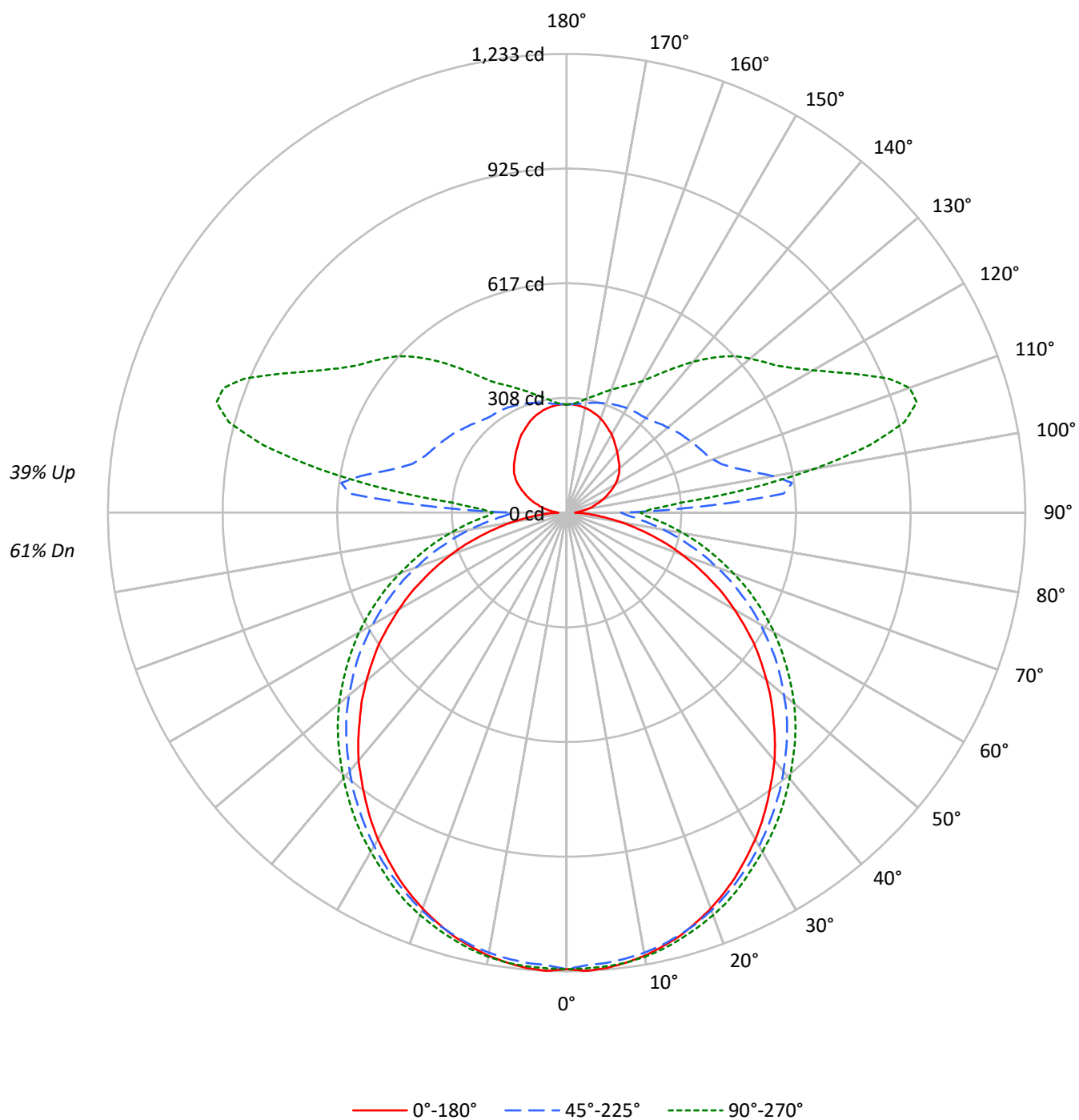
Lumens per Lamp: N/A
Luminaire Lumens: 6308.2 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	99	94	90	86	92	88	84	81	77	74	71	66	64	62	57	55	54
2	90	82	75	69	84	76	70	65	67	62	58	58	54	51	49	47	44
3	82	71	63	57	76	67	60	54	58	53	48	51	46	43	43	40	37
4	74	63	54	48	69	59	51	45	52	45	41	45	40	36	38	35	32
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	34	31	27
6	63	50	41	35	58	47	39	34	41	35	30	36	31	27	31	27	24
7	58	45	37	31	54	42	35	29	37	31	27	33	28	24	28	24	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	32	25	21	29	23	19	25	21	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10007	10007	10007
5°	10035	9746	9764
10°	9969	9555	9527
15°	9876	9339	9260
20°	9738	9106	9001
25°	9582	8848	8722
30°	9414	8593	8436
35°	9223	8333	8182
40°	9070	8082	7919
45°	8844	7847	7686
50°	8650	7580	7441
55°	8452	7323	7159
60°	8141	7003	6893
65°	7801	6658	6574
70°	7389	6263	6205
75°	6813	5825	5852
80°	6161	5378	5483
85°	5298	4930	5186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8844 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.8
10°-20°	333.2	5.3
20°-30°	503.7	8.0
30°-40°	609.4	9.7
40°-50°	644.3	10.2
50°-60°	606.3	9.6
60°-70°	503.1	8.0
70°-80°	353.1	5.6
80°-90°	200.2	3.2
90°-100°	334.6	5.3
100°-110°	527.3	8.4
110°-120°	450.6	7.1
120°-130°	362.2	5.7
130°-140°	288.9	4.6
140°-150°	212.6	3.4
150°-160°	147.4	2.3
160°-170°	86.7	1.4
170°-180°	28.2	0.4
0°-30°	953.2	15.1
0°-40°	1562.6	24.8
0°-60°	2813.2	44.6
0°-90°	3869.6	61.3
90°-120°	1312.5	20.8
90°-150°	2176.2	34.5
90°-180°	2439.0	38.7
0°-180°	6308.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1229	1224	1215	1226	1224	117
15°	1178	1179	1175	1187	1186	332
25°	1077	1086	1090	1105	1106	496
35°	943	959	973	992	996	590
45°	786	812	838	862	868	608
55°	616	644	686	713	722	549
65°	426	470	517	551	562	422
75°	236	287	345	383	396	251
85°	73	131	192	234	247	76
90°	23	82	146	187	199	16
95°	37	123	585	387	308	35
105°	79	137	466	932	940	85
115°	126	168	399	737	877	125
125°	170	199	371	611	689	151
135°	198	235	342	520	594	153
145°	226	257	328	417	464	142
155°	256	276	319	361	377	118
165°	278	287	306	324	329	79
175°	290	291	293	297	296	28
180°	291	291	291	291	291	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1227.2	1227.2	1227.2	1227.2	1227.2
2.5°	1232.7	1228.6	1217.6	1227.2	1225.8
5°	1228.6	1224.4	1214.8	1225.8	1224.4
7.5°	1220.3	1217.6	1209.3	1221.7	1220.3
10°	1209.3	1208.0	1201.1	1213.4	1212.1
12.5°	1194.2	1194.2	1190.1	1201.1	1201.1
15°	1177.7	1179.1	1175.0	1187.3	1186.0
17.5°	1155.7	1159.9	1158.5	1170.8	1169.5
20°	1132.4	1136.5	1137.9	1151.6	1151.6
22.5°	1106.3	1111.8	1114.5	1128.2	1131.0
25°	1077.4	1085.6	1089.8	1104.9	1106.3
27.5°	1045.8	1058.2	1063.7	1077.4	1078.8
30°	1014.2	1025.2	1034.8	1049.9	1052.7
32.5°	979.8	993.6	1004.6	1022.4	1025.2
35°	942.7	959.2	973.0	992.2	996.3
37.5°	905.6	924.9	941.4	960.6	964.7
40°	869.9	887.8	907.0	927.6	933.1
42.5°	828.7	849.3	872.6	896.0	900.1
45°	786.1	812.2	838.3	861.6	868.5
47.5°	746.2	772.3	802.6	825.9	834.2
50°	702.2	732.5	762.7	790.2	798.4
52.5°	658.3	688.5	724.2	751.7	760.0
55°	615.7	644.5	685.7	713.2	721.5
57.5°	567.6	603.3	643.1	676.1	683.0
60°	520.8	556.6	601.9	633.5	644.5
62.5°	475.5	515.3	560.7	592.3	603.3
65°	426.0	470.0	516.7	551.1	562.1
67.5°	379.3	426.0	475.5	509.8	520.8
70°	331.2	377.9	430.1	467.2	476.9
72.5°	284.5	332.6	388.9	424.6	435.6
75°	236.4	287.2	344.9	383.4	395.8
77.5°	191.0	244.6	305.1	343.6	357.3
80°	149.8	204.8	265.2	306.5	317.4
82.5°	108.6	166.3	226.7	269.4	281.7
85°	72.8	130.6	192.4	233.6	247.4
87.5°	45.3	101.7	162.2	202.0	214.4
90°	22.6	81.6	146.3	187.3	198.9
92.5°	28.6	112.7	351.8	240.4	229.3
95°	36.8	122.6	585.4	387.3	308.5
97.5°	47.9	122.0	611.1	619.4	495.7
100°	58.5	125.1	563.9	793.0	675.3
102.5°	70.0	129.9	508.5	898.0	833.0
105°	79.3	136.8	465.6	932.4	940.2
107.5°	92.4	145.2	435.3	912.7	986.8
110°	104.2	152.2	418.9	858.6	981.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	115.3	160.7	407.0	794.4	939.2
115°	125.9	168.4	399.0	737.2	876.6
117.5°	138.5	176.5	391.5	689.6	816.6
120°	149.8	183.0	384.6	654.7	764.9
122.5°	161.2	190.6	377.2	630.4	722.4
125°	169.5	199.0	371.1	611.3	688.9
127.5°	178.7	209.3	363.1	591.2	666.1
130°	184.7	217.9	355.6	570.4	644.1
132.5°	192.1	226.4	349.6	547.0	621.8
135°	197.6	234.8	342.2	519.6	593.6
137.5°	204.5	240.6	336.7	492.2	561.9
140°	211.9	247.2	331.9	465.3	529.3
142.5°	218.6	253.2	329.2	441.2	495.0
145°	226.0	257.2	328.1	417.4	463.5
147.5°	234.6	262.4	326.4	396.6	433.9
150°	242.6	267.2	324.6	382.4	408.1
152.5°	248.6	271.8	321.8	371.5	390.9
155°	255.5	275.8	318.9	361.2	376.7
157.5°	262.3	279.5	316.1	351.5	363.5
160°	268.6	282.6	312.6	341.8	351.5
162.5°	274.3	285.2	309.2	332.4	340.1
165°	278.3	286.9	305.8	323.8	328.6
167.5°	282.9	288.4	302.4	316.4	319.5
170°	285.8	289.5	298.9	309.0	310.9
172.5°	288.6	290.4	295.5	302.4	302.4
175°	290.4	290.9	293.2	297.2	296.1
177.5°	291.5	290.9	291.5	293.5	291.5
180°	290.9	290.9	290.9	290.9	290.9

(END OF REPORT)