

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: P1033215

Luminaire Tested: S124DIW-B1020D770UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033215
REPORT IS A COMBINATION OF REPORTS P996917 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D770UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

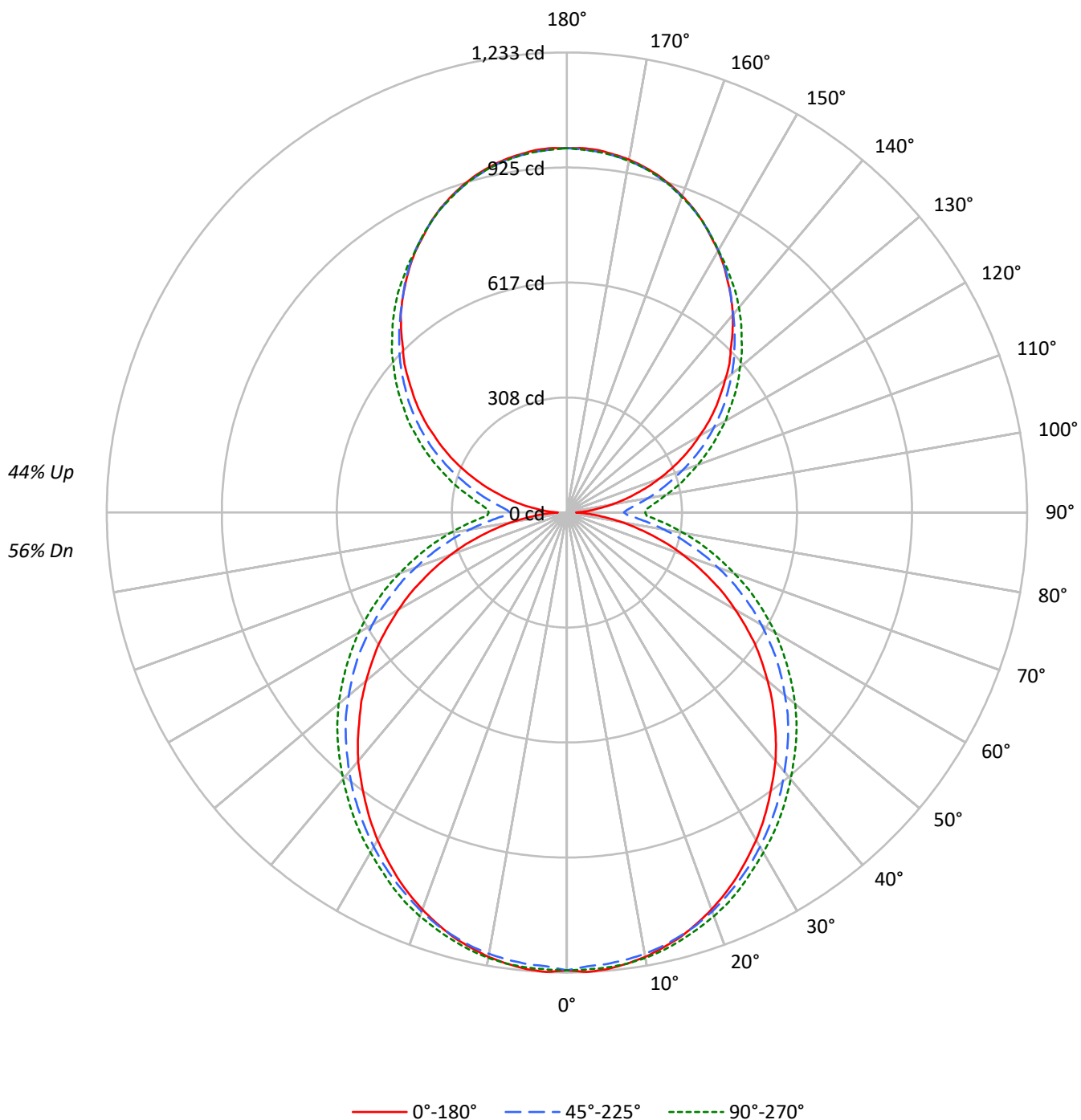
Lumens per Lamp: N/A
Luminaire Lumens: 6895.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 70
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	79	74	72	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	65	60	56	55	51	48	46	43	41
3	81	71	63	56	75	66	59	53	57	51	47	48	44	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	43	38	34	36	32	29
5	68	55	47	40	62	52	44	38	45	38	34	38	33	30	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	29	26	29	25	22
7	57	45	36	30	53	42	34	29	36	30	26	31	26	23	26	23	20
8	53	40	32	27	49	38	31	26	33	27	23	28	24	20	24	20	17
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	19	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

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	1.7
10°-20°	333.2	4.8
20°-30°	503.7	7.3
30°-40°	609.4	8.8
40°-50°	644.3	9.3
50°-60°	606.3	8.8
60°-70°	503.1	7.3
70°-80°	353.1	5.1
80°-90°	201.1	2.9
90°-100°	182.1	2.6
100°-110°	278.4	4.0
110°-120°	382.7	5.6
120°-130°	460.2	6.7
130°-140°	494.0	7.2
140°-150°	474.3	6.9
150°-160°	396.5	5.8
160°-170°	263.8	3.8
170°-180°	92.4	1.3
0°-30°	953.2	13.8
0°-40°	1562.6	22.7
0°-60°	2813.2	40.8
0°-90°	3870.6	56.1
90°-120°	843.2	12.2
90°-150°	2271.7	32.9
90°-180°	3024.0	43.9
0°-180°	6895.0	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°	24	88	153	197	210	18
95°	63	115	177	216	229	63
105°	188	217	270	307	320	201
115°	337	350	392	422	431	333
125°	485	484	517	542	548	433
135°	621	626	635	656	662	481
145°	753	754	755	762	766	471
155°	861	861	860	863	860	396
165°	937	935	933	938	935	264
175°	975	971	970	976	970	93
180°	976	976	976	976	976	

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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°	24.3	87.6	152.6	197.0	209.6
92.5°	40.2	98.1	161.0	201.8	213.5
95°	63.2	115.3	177.0	216.4	228.7
97.5°	89.0	134.8	197.3	236.0	248.4
100°	120.8	159.5	219.9	258.5	268.2
102.5°	155.5	186.5	244.8	282.8	294.6
105°	188.3	216.6	270.4	307.1	320.2
107.5°	225.3	249.4	298.2	335.7	344.5
110°	261.7	282.4	329.7	359.8	373.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	299.5	316.0	359.9	390.1	401.1
115°	337.4	349.8	392.3	421.7	430.6
117.5°	374.4	382.7	423.2	449.8	458.5
120°	410.1	417.2	454.8	478.5	491.0
122.5°	448.6	449.4	485.7	511.0	516.8
125°	485.0	483.6	517.2	541.8	548.5
127.5°	519.0	519.8	545.8	569.0	577.9
130°	553.8	554.7	576.7	600.0	605.1
132.5°	590.8	590.9	606.6	628.5	636.0
135°	621.1	625.6	635.3	655.8	661.8
137.5°	656.6	657.6	664.6	682.9	690.6
140°	692.1	692.3	693.6	710.7	716.9
142.5°	723.3	724.8	722.6	737.7	743.2
145°	752.7	754.3	755.1	762.5	765.8
147.5°	782.9	785.3	784.5	785.2	789.9
150°	810.1	811.7	811.7	811.7	811.0
152.5°	834.4	835.9	836.6	838.9	836.6
155°	860.8	860.8	860.0	863.1	860.0
157.5°	883.4	881.9	881.9	884.2	881.9
160°	903.1	902.3	901.6	903.8	900.1
162.5°	921.2	918.9	918.2	922.7	918.9
165°	937.1	934.8	933.3	937.8	934.8
167.5°	949.9	946.9	946.9	951.4	946.9
170°	960.5	956.7	957.4	962.0	956.7
172.5°	968.0	965.0	965.0	970.3	965.0
175°	974.8	971.0	970.3	975.6	970.3
177.5°	977.8	974.0	974.0	979.3	973.3
180°	976.3	976.3	976.3	976.3	976.3

(END OF REPORT)