

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: P1032531

Luminaire Tested: S124DIW-B1020D770UB2750-4F0-XX-W2A-D_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032531
REPORT IS A COMBINATION OF REPORTS P996902 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D770UB2750-4F0-XX-W2A-D_3000K
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

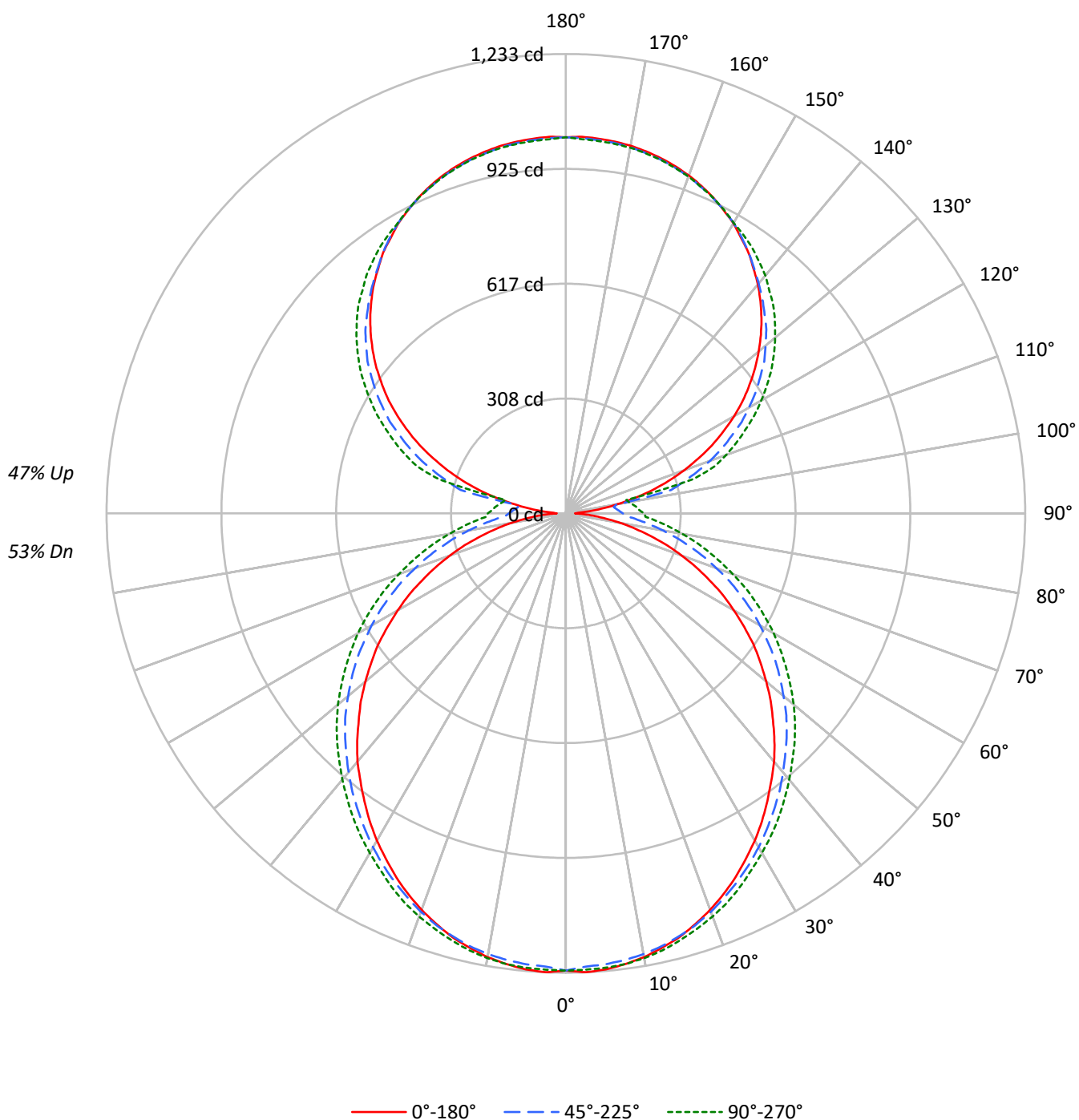
Lumens per Lamp: N/A
Luminaire Lumens: 7310.0 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1032531

CATALOG NUMBER: S124DIW-B1020D770UB2750-4F0-XX-W2A-D_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P1032531

CATALOG NUMBER: S124DIW-B1020D770UB2750-4F0-XX-W2A-D_3000K

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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	97	93	88	84	90	86	82	79	73	70	68	61	59	57	50	49	48
2	88	80	74	68	81	74	69	64	63	59	55	53	50	47	44	41	39
3	80	70	62	56	74	65	58	53	55	50	46	47	43	39	38	35	33
4	73	62	53	47	67	57	50	44	49	43	39	41	37	33	34	31	28
5	67	55	46	40	62	51	43	38	44	38	33	37	32	29	30	27	24
6	62	49	41	35	57	46	38	33	39	33	29	33	29	25	28	24	21
7	57	44	36	30	53	41	34	29	36	30	25	30	25	22	25	21	19
8	53	40	32	27	49	37	30	25	32	27	22	28	23	19	23	19	17
9	49	37	29	24	45	34	27	22	30	24	20	25	21	17	21	18	15
10	46	34	26	21	42	31	25	20	27	22	18	23	19	16	20	16	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

TEST NUMBER: P1032531

CATALOG NUMBER: S124DIW-B1020D770UB2750-4F0-XX-W2A-D_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.6
10°-20°	333.2	4.6
20°-30°	503.7	6.9
30°-40°	609.4	8.3
40°-50°	644.3	8.8
50°-60°	606.3	8.3
60°-70°	503.1	6.9
70°-80°	353.1	4.8
80°-90°	201.1	2.8
90°-100°	152.0	2.1
100°-110°	308.4	4.2
110°-120°	480.3	6.6
120°-130°	568.2	7.8
130°-140°	586.7	8.0
140°-150°	538.0	7.4
150°-160°	431.6	5.9
160°-170°	278.3	3.8
170°-180°	95.9	1.3
0°-30°	953.2	13.0
0°-40°	1562.6	21.4
0°-60°	2813.2	38.5
0°-90°	3870.6	52.9
90°-120°	940.8	12.9
90°-150°	2633.6	36.0
90°-180°	3439.0	47.0
0°-180°	7310.0	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	17
95°	59	79	136	178	191	65
105°	240	272	326	368	351	252
115°	433	447	490	522	532	426
125°	602	604	636	665	674	538
135°	743	742	755	778	788	573
145°	855	856	856	864	872	534
155°	936	936	934	937	935	431
165°	987	983	983	989	982	279
175°	1010	1005	1006	1013	1004	96
180°	1010	1010	1010	1010	1010	

TEST NUMBER: P1032531

CATALOG NUMBER: S124DIW-B1020D770UB2750-4F0-XX-W2A-D_3000K

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°	31.9	78.5	143.7	186.7	197.7
95°	59.4	79.1	136.2	177.8	190.9
97.5°	95.8	152.2	129.3	168.8	181.9
100°	138.9	188.2	137.6	161.9	172.3
102.5°	188.8	228.0	289.4	155.2	166.2
105°	239.7	271.7	326.3	367.5	351.2
107.5°	288.8	314.3	367.7	405.9	418.5
110°	337.2	358.7	411.3	444.4	457.7



TEST NUMBER: P1032531

CATALOG NUMBER: S124DIW-B1020D770UB2750-4F0-XX-W2A-D_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.1	405.2	452.1	481.5	495.5
115°	432.6	447.2	490.5	522.2	531.8
117.5°	477.1	488.4	531.9	560.0	571.0
120°	521.1	528.2	567.3	596.3	605.8
122.5°	563.4	564.9	603.5	631.8	639.9
125°	602.0	603.6	636.5	664.9	673.9
127.5°	640.5	639.9	671.2	695.1	704.1
130°	676.1	675.5	699.7	725.3	733.5
132.5°	710.1	710.2	729.7	753.9	761.3
135°	742.7	741.9	754.7	778.2	787.9
137.5°	772.9	771.6	780.9	803.0	809.1
140°	802.3	802.5	805.4	825.5	833.2
142.5°	827.5	830.5	829.8	846.5	852.0
145°	854.7	855.5	855.5	864.5	871.5
147.5°	875.8	878.9	878.2	880.3	886.6
150°	899.2	900.8	900.1	900.1	900.8
152.5°	917.4	919.7	918.2	919.7	918.9
155°	935.6	936.3	934.0	937.1	934.8
157.5°	951.4	951.4	948.4	952.2	948.4
160°	965.0	962.7	962.0	966.5	962.0
162.5°	977.1	974.1	973.3	977.8	972.6
165°	986.9	983.1	983.1	989.2	982.4
167.5°	995.2	991.4	990.7	997.5	989.9
170°	1002.0	997.5	998.2	1004.3	996.7
172.5°	1006.5	1002.0	1002.8	1008.8	1000.5
175°	1009.6	1005.0	1005.8	1012.6	1003.5
177.5°	1011.8	1006.5	1008.0	1014.1	1005.0
180°	1009.6	1009.6	1009.6	1009.6	1009.6

(END OF REPORT)