

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: P1031288

Luminaire Tested: S123DIW-B1000D1030UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031288
REPORT IS A COMBINATION OF REPORTS P990580 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1030UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

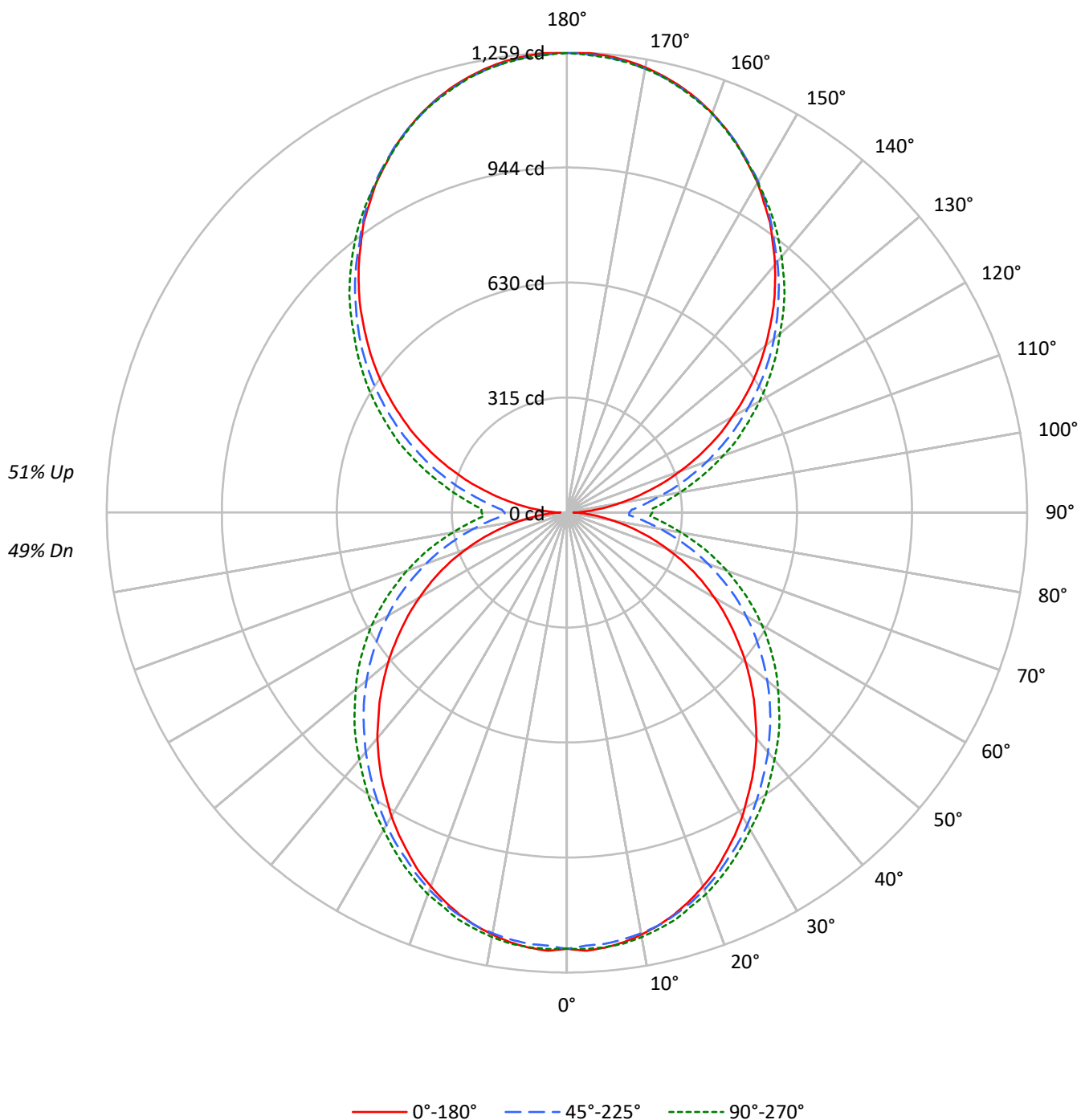
Lumens per Lamp: N/A
Luminaire Lumens: 7501.0 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	83	83	83	68	68	68	55	55	55	49		
1	97	92	87	84	89	85	81	77	71	68	66	59	57	55	47	46	45	39		
2	87	80	73	67	80	73	68	63	62	57	54	51	48	45	41	39	37	32		
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31	27		
4	73	61	53	47	66	57	49	44	48	42	38	40	35	32	32	29	26	23		
5	67	55	46	40	61	50	43	37	43	37	32	35	31	28	29	25	23	19		
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	23	20	17		
7	57	44	36	30	52	41	33	28	35	29	25	29	24	21	24	20	18	15		
8	52	40	32	27	48	37	30	25	32	26	22	26	22	19	22	18	16	13		
9	49	36	29	24	45	34	27	22	29	23	19	24	20	17	20	17	14	12		
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	19	15	13	11		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12853	12853	12853
5°	12888	12476	12466
10°	12768	12138	12046
15°	12598	11764	11599
20°	12358	11349	11120
25°	12064	10880	10624
30°	11761	10457	10127
35°	11423	10011	9720
40°	11100	9605	9292
45°	10740	9211	8939
50°	10386	8821	8555
55°	9993	8421	8203
60°	9609	8011	7840
65°	9213	7575	7418
70°	8620	7085	6983
75°	7867	6528	6532
80°	6993	5962	6019
85°	6119	5505	5650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10740 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	1.5
10°-20°	322.9	4.3
20°-30°	482.9	6.4
30°-40°	576.5	7.7
40°-50°	603.2	8.0
50°-60°	566.1	7.5
60°-70°	472.8	6.3
70°-80°	338.1	4.5
80°-90°	203.8	2.7
90°-100°	207.4	2.8
100°-110°	338.0	4.5
110°-120°	479.3	6.4
120°-130°	584.3	7.8
130°-140°	632.8	8.4
140°-150°	609.9	8.1
150°-160°	510.7	6.8
160°-170°	340.0	4.5
170°-180°	119.0	1.6
0°-30°	919.1	12.3
0°-40°	1495.6	19.9
0°-60°	2664.9	35.5
0°-90°	3679.7	49.1
90°-120°	1024.7	13.7
90°-150°	2851.6	38.0
90°-180°	3821.0	50.9
0°-180°	7501.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1195	1193	1185	1195	1194	113
15°	1138	1142	1141	1154	1152	321
25°	1028	1041	1044	1061	1061	474
35°	884	905	922	942	947	553
45°	723	754	787	812	822	558
55°	552	594	641	676	687	494
65°	381	432	489	528	541	377
75°	207	268	333	376	392	221
85°	64	129	198	242	255	66
90°	18	92	171	219	234	16
95°	73	130	202	246	259	75
105°	233	266	331	367	381	248
115°	426	445	490	522	532	422
125°	618	622	657	680	686	552
135°	800	805	818	837	842	616
145°	969	969	972	982	983	605
155°	1108	1108	1109	1113	1106	510
165°	1206	1204	1204	1210	1202	340
175°	1255	1251	1251	1257	1250	119
180°	1258	1258	1258	1258	1258	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1194.1	1194.1	1194.1	1194.1	1194.1
2.5°	1200.6	1196.7	1186.3	1196.7	1195.4
5°	1195.4	1192.8	1185.0	1195.4	1194.1
7.5°	1186.3	1186.3	1178.5	1191.5	1190.2
10°	1173.3	1175.9	1169.4	1182.4	1179.8
12.5°	1157.6	1161.5	1157.6	1169.4	1166.8
15°	1138.1	1142.0	1140.7	1153.7	1152.4
17.5°	1114.7	1122.5	1121.2	1132.9	1130.3
20°	1088.7	1096.5	1099.1	1110.8	1112.1
22.5°	1061.4	1069.2	1073.1	1088.7	1087.4
25°	1027.6	1040.6	1044.5	1061.4	1061.4
27.5°	995.1	1009.4	1017.2	1031.5	1032.8
30°	959.9	976.8	987.3	1002.9	1002.9
32.5°	920.9	940.4	954.7	971.6	975.5
35°	884.5	905.3	922.2	941.7	946.9
37.5°	845.5	868.9	888.4	910.5	914.4
40°	806.5	829.9	855.9	878.0	883.2
42.5°	763.5	793.4	820.8	845.5	853.3
45°	723.2	754.4	786.9	811.7	822.1
47.5°	680.3	715.4	751.8	779.1	786.9
50°	638.7	675.1	715.4	745.3	754.4
52.5°	594.4	633.5	679.0	710.2	721.9
55°	551.5	594.4	641.3	676.4	686.8
57.5°	509.9	554.1	604.8	640.0	651.7
60°	465.7	512.5	565.8	602.2	616.5
62.5°	424.0	472.2	529.4	565.8	578.8
65°	381.1	431.8	489.1	528.1	541.1
67.5°	338.2	391.5	448.8	491.7	502.1
70°	292.7	348.6	411.0	452.7	465.7
72.5°	251.0	307.0	372.0	414.9	427.9
75°	206.8	267.9	333.0	375.9	391.5
77.5°	169.1	230.2	295.3	340.8	352.5
80°	128.8	192.5	260.1	304.4	317.4
82.5°	93.7	158.7	227.6	271.9	284.9
85°	63.7	128.8	197.7	241.9	254.9
87.5°	39.0	104.1	170.4	214.6	227.6
90°	17.9	91.5	170.7	218.9	233.8
92.5°	45.2	107.1	178.1	224.0	233.7
95°	72.6	130.2	201.9	246.2	259.2
97.5°	108.8	160.6	227.7	271.7	283.7
100°	146.1	193.6	258.5	299.1	314.1
102.5°	189.2	228.6	294.1	333.5	345.5
105°	232.7	265.9	330.8	367.2	380.9
107.5°	282.8	311.1	368.4	406.5	417.2
110°	328.9	354.3	408.3	446.1	454.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	378.3	397.5	446.9	484.5	496.2
115°	426.5	445.0	489.8	522.1	531.5
117.5°	476.8	488.2	530.5	561.8	569.2
120°	522.0	534.4	572.4	601.3	608.5
122.5°	570.4	577.0	615.3	640.9	647.1
125°	618.5	621.5	657.2	680.5	685.7
127.5°	664.0	668.6	699.1	719.2	724.3
130°	709.4	716.0	739.1	759.8	760.7
132.5°	753.6	761.5	779.0	797.5	801.6
135°	800.0	804.6	818.0	837.4	841.9
137.5°	842.5	846.1	858.2	874.1	877.6
140°	885.7	890.6	895.5	914.0	913.6
142.5°	926.2	929.8	931.8	947.7	949.3
145°	968.7	969.3	972.3	981.7	983.0
147.5°	1003.9	1007.9	1010.8	1014.7	1014.0
150°	1042.5	1044.4	1046.4	1046.4	1043.1
152.5°	1074.1	1077.0	1078.0	1080.0	1075.1
155°	1107.7	1107.7	1108.7	1112.6	1105.7
157.5°	1136.3	1135.3	1136.3	1140.3	1134.4
160°	1163.0	1161.0	1161.0	1166.0	1162.0
162.5°	1186.7	1183.8	1184.8	1189.7	1182.8
165°	1206.5	1203.5	1203.5	1209.5	1202.5
167.5°	1223.3	1219.3	1220.3	1226.3	1220.3
170°	1237.1	1233.2	1233.2	1240.1	1233.2
172.5°	1248.0	1244.0	1244.0	1250.0	1243.1
175°	1254.9	1251.0	1251.0	1256.9	1250.0
177.5°	1258.9	1254.9	1254.9	1260.8	1253.9
180°	1257.9	1257.9	1257.9	1257.9	1257.9

(END OF REPORT)