

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: P1031318

Luminaire Tested: S123DIW-B1000D1320UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031318
REPORT IS A COMBINATION OF REPORTS P990646 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB50-4F0-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

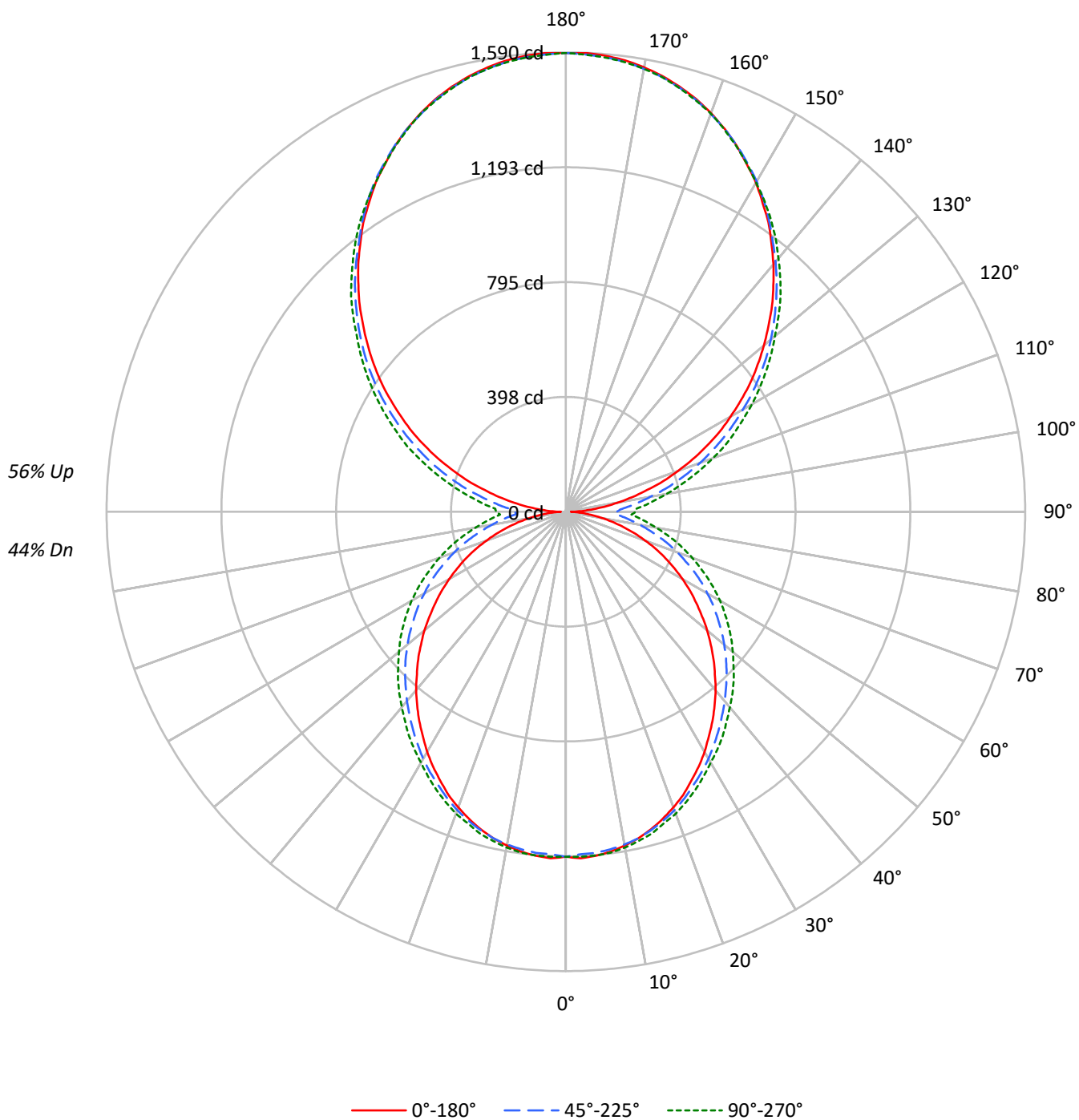
Lumens per Lamp: N/A
Luminaire Lumens: 8417.0 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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	30	10
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50
1	95	91	87	83	87	83	79	76	69	66	64	55	53	52	43	42	41
2	87	79	72	67	79	72	66	62	60	55	52	48	45	43	37	35	34
3	79	69	61	55	72	63	56	51	52	47	43	42	39	36	33	30	28
4	72	61	53	46	65	56	49	43	46	41	37	37	33	30	29	26	24
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	21
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	24	21	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	22	18	16
8	52	39	32	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	26	21	41	30	24	19	26	20	17	21	17	14	17	14	12

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	1.3
10°-20°	322.9	3.8
20°-30°	482.9	5.7
30°-40°	576.5	6.8
40°-50°	603.2	7.2
50°-60°	566.1	6.7
60°-70°	472.8	5.6
70°-80°	338.1	4.0
80°-90°	204.5	2.4
90°-100°	228.6	2.7
100°-110°	402.4	4.8
110°-120°	588.8	7.0
120°-130°	728.4	8.7
130°-140°	794.9	9.4
140°-150°	769.2	9.1
150°-160°	644.8	7.7
160°-170°	429.2	5.1
170°-180°	150.3	1.8
0°-30°	919.1	10.9
0°-40°	1495.6	17.8
0°-60°	2664.9	31.7
0°-90°	3680.4	43.7
90°-120°	1219.8	14.5
90°-150°	3512.3	41.7
90°-180°	4737.0	56.3
0°-180°	8417.0	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	94	177	226	242	18
95°	88	147	221	266	279	92
105°	291	325	392	428	443	311
115°	537	556	600	633	642	532
125°	780	784	819	841	845	696
135°	1009	1016	1029	1047	1051	778
145°	1223	1224	1228	1237	1237	763
155°	1399	1399	1400	1405	1396	644
165°	1523	1520	1520	1527	1518	430
175°	1584	1580	1580	1587	1578	151
180°	1588	1588	1588	1588	1588	

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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°	18.1	94.3	176.9	226.1	241.6
92.5°	53.0	116.4	189.0	235.6	244.8
95°	87.9	147.3	221.1	266.4	279.4
97.5°	134.0	187.1	255.7	301.0	312.7
100°	181.4	230.5	296.6	338.0	353.5
102.5°	236.2	276.4	343.7	383.8	395.6
105°	291.1	324.8	392.0	428.4	442.6
107.5°	354.7	383.2	441.6	480.5	490.9
110°	413.3	439.2	493.7	532.6	540.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	475.7	495.1	544.5	583.3	595.0
115°	536.7	556.1	600.4	632.9	642.1
117.5°	600.4	612.0	653.7	685.0	691.7
120°	657.7	671.7	708.3	737.0	743.7
122.5°	718.8	726.4	764.2	789.1	794.4
125°	779.9	783.7	818.9	841.2	845.3
127.5°	837.3	843.5	873.5	892.0	896.1
130°	894.7	903.4	925.6	945.3	944.4
132.5°	950.8	960.8	977.8	994.9	997.8
135°	1009.4	1015.6	1028.7	1047.1	1051.1
137.5°	1063.1	1068.0	1080.9	1095.4	1098.2
140°	1117.9	1124.2	1129.3	1147.6	1145.3
142.5°	1169.1	1174.0	1176.5	1192.2	1192.4
145°	1222.7	1223.9	1227.7	1236.8	1237.0
147.5°	1267.6	1272.6	1276.3	1280.2	1277.9
150°	1316.2	1318.7	1321.2	1321.2	1316.3
152.5°	1356.2	1359.9	1361.1	1363.6	1357.4
155°	1398.6	1398.6	1399.8	1404.8	1396.1
157.5°	1434.8	1433.5	1434.8	1439.7	1432.3
160°	1468.4	1465.9	1465.9	1472.2	1467.2
162.5°	1498.4	1494.6	1495.9	1502.1	1493.4
165°	1523.3	1519.6	1519.6	1527.1	1518.3
167.5°	1544.5	1539.6	1540.8	1548.3	1540.8
170°	1562.0	1557.0	1557.0	1565.8	1557.0
172.5°	1575.7	1570.7	1570.7	1578.2	1569.5
175°	1584.5	1579.5	1579.5	1587.0	1578.2
177.5°	1589.5	1584.5	1584.5	1592.0	1583.2
180°	1588.2	1588.2	1588.2	1588.2	1588.2

(END OF REPORT)