

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: P1031306

Luminaire Tested: S123DIW-B1000D1320UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031306
REPORT IS A COMBINATION OF REPORTS P990628 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

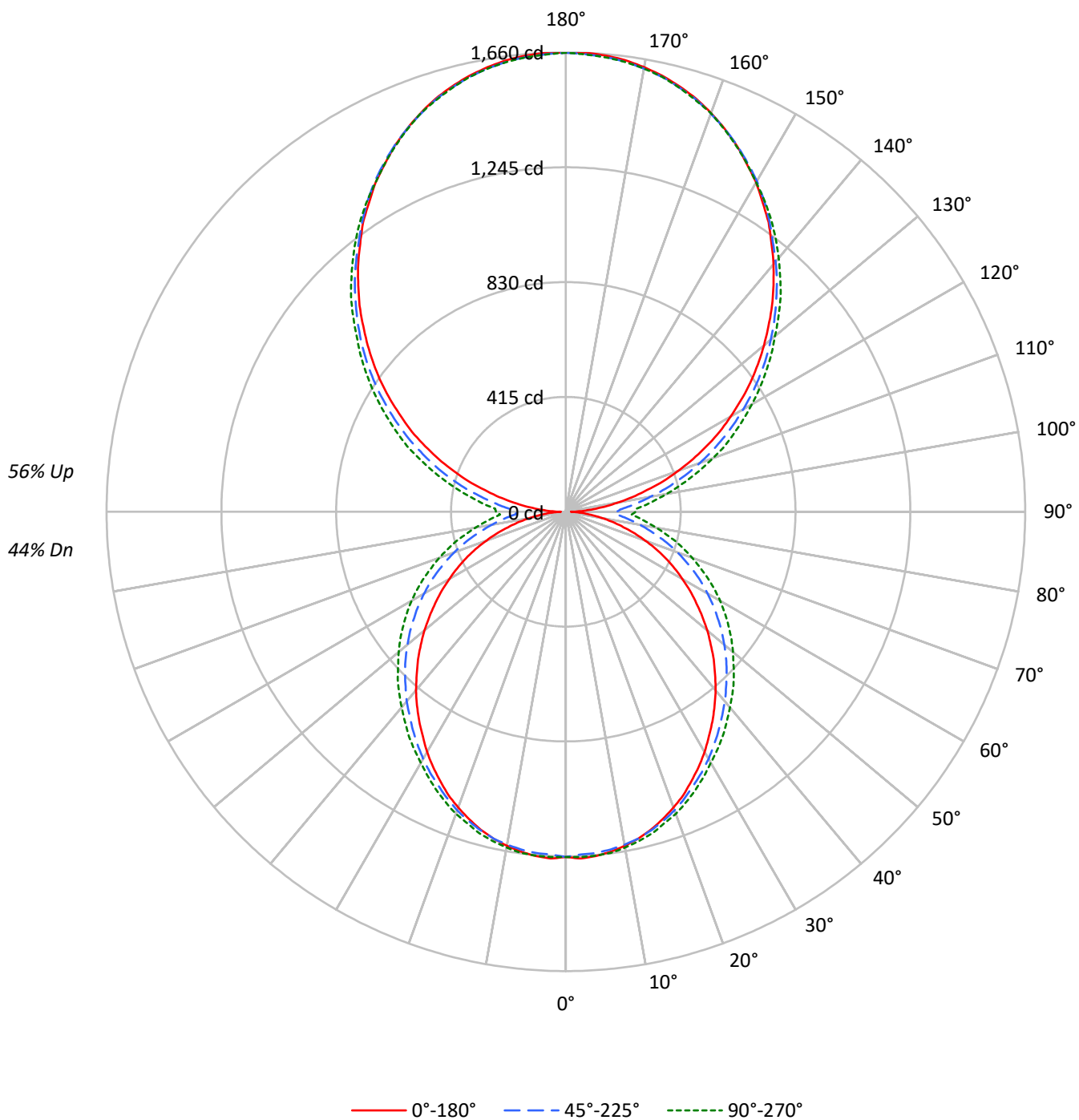
Lumens per Lamp: N/A
Luminaire Lumens: 8792.0 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	13426	13426	13426
5°	13463	13032	13021
10°	13337	12679	12583
15°	13160	12289	12116
20°	12910	11855	11616
25°	12602	11366	11098
30°	12287	10923	10578
35°	11931	10459	10154
40°	11594	10033	9706
45°	11220	9621	9337
50°	10848	9214	8937
55°	10439	8796	8568
60°	10037	8369	8190
65°	9624	7913	7749
70°	9003	7402	7293
75°	8217	6818	6823
80°	7302	6228	6287
85°	6397	5750	5902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11220 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	1.3
10°-20°	337.3	3.8
20°-30°	504.4	5.7
30°-40°	602.3	6.9
40°-50°	630.1	7.2
50°-60°	591.3	6.7
60°-70°	493.9	5.6
70°-80°	353.2	4.0
80°-90°	213.6	2.4
90°-100°	238.8	2.7
100°-110°	420.3	4.8
110°-120°	615.1	7.0
120°-130°	760.9	8.7
130°-140°	830.3	9.4
140°-150°	803.4	9.1
150°-160°	673.5	7.7
160°-170°	448.3	5.1
170°-180°	157.0	1.8
0°-30°	960.1	10.9
0°-40°	1562.3	17.8
0°-60°	2783.8	31.7
0°-90°	3844.5	43.7
90°-120°	1274.2	14.5
90°-150°	3668.7	41.7
90°-180°	4947.0	56.3
0°-180°	8792.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1249	1246	1238	1249	1247	118
15°	1189	1193	1192	1205	1204	335
25°	1073	1087	1091	1109	1109	495
35°	924	946	963	984	989	578
45°	756	788	822	848	859	583
55°	576	621	670	706	717	516
65°	398	451	511	552	565	394
75°	216	280	348	393	409	231
85°	67	134	206	253	266	69
90°	19	98	185	236	252	18
95°	92	154	231	278	292	96
105°	304	339	409	448	462	325
115°	561	581	627	661	671	555
125°	815	819	855	879	883	727
135°	1054	1061	1074	1094	1098	812
145°	1277	1278	1282	1292	1292	797
155°	1461	1461	1462	1467	1458	672
165°	1591	1587	1587	1595	1586	449
175°	1655	1650	1650	1658	1648	157
180°	1659	1659	1659	1659	1659	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.3	1247.3	1247.3	1247.3	1247.3
2.5°	1254.1	1250.0	1239.2	1250.0	1248.7
5°	1248.7	1246.0	1237.8	1248.7	1247.3
7.5°	1239.2	1239.2	1231.0	1244.6	1243.3
10°	1225.6	1228.3	1221.5	1235.1	1232.4
12.5°	1209.3	1213.4	1209.3	1221.5	1218.8
15°	1188.9	1193.0	1191.6	1205.2	1203.8
17.5°	1164.4	1172.6	1171.2	1183.5	1180.7
20°	1137.3	1145.4	1148.1	1160.4	1161.7
22.5°	1108.7	1116.9	1121.0	1137.3	1135.9
25°	1073.4	1087.0	1091.1	1108.7	1108.7
27.5°	1039.4	1054.4	1062.5	1077.5	1078.8
30°	1002.8	1020.4	1031.3	1047.6	1047.6
32.5°	962.0	982.4	997.3	1015.0	1019.1
35°	923.9	945.7	963.4	983.7	989.2
37.5°	883.2	907.6	928.0	951.1	955.2
40°	842.4	866.9	894.1	917.2	922.6
42.5°	797.6	828.8	857.4	883.2	891.3
45°	755.5	788.1	822.0	847.9	858.7
47.5°	710.6	747.3	785.4	813.9	822.0
50°	667.1	705.2	747.3	778.6	788.1
52.5°	620.9	661.7	709.3	741.9	754.1
55°	576.1	620.9	669.9	706.5	717.4
57.5°	532.6	578.8	631.8	668.5	680.7
60°	486.4	535.3	591.1	629.1	644.0
62.5°	443.0	493.2	553.0	591.1	604.6
65°	398.1	451.1	510.9	551.7	565.2
67.5°	353.3	409.0	468.8	513.6	524.5
70°	305.7	364.1	429.4	472.8	486.4
72.5°	262.2	320.7	388.6	433.4	447.0
75°	216.0	279.9	347.8	392.7	409.0
77.5°	176.6	240.5	308.4	356.0	368.2
80°	134.5	201.1	271.7	317.9	331.5
82.5°	97.8	165.8	237.8	284.0	297.6
85°	66.6	134.5	206.5	252.7	266.3
87.5°	40.8	108.7	178.0	224.2	237.8
90°	19.0	98.5	184.8	236.2	252.4
92.5°	55.4	121.6	197.4	246.1	255.7
95°	91.8	153.9	230.9	278.2	291.8
97.5°	140.0	195.4	267.1	314.4	326.7
100°	189.4	240.7	309.8	353.1	369.3
102.5°	246.8	288.7	359.0	400.9	413.2
105°	304.1	339.3	409.4	447.5	462.3
107.5°	370.5	400.3	461.3	501.8	512.8
110°	431.7	458.7	515.7	556.2	564.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	496.9	517.2	568.8	609.3	621.5
115°	560.6	580.8	627.1	661.0	670.6
117.5°	627.1	639.3	682.9	715.5	722.4
120°	686.9	701.6	739.9	769.8	776.7
122.5°	750.8	758.8	798.3	824.3	829.9
125°	814.7	818.6	855.4	878.6	882.9
127.5°	874.6	881.0	912.4	931.8	936.1
130°	934.5	943.6	966.9	987.4	986.5
132.5°	993.1	1003.5	1021.3	1039.3	1042.3
135°	1054.3	1060.9	1074.4	1093.7	1097.9
137.5°	1110.4	1115.6	1129.0	1144.2	1147.1
140°	1167.7	1174.2	1179.5	1198.6	1196.3
142.5°	1221.1	1226.3	1228.9	1245.3	1245.5
145°	1277.2	1278.4	1282.3	1291.9	1292.1
147.5°	1324.0	1329.2	1333.1	1337.2	1334.8
150°	1374.8	1377.4	1380.0	1380.0	1374.9
152.5°	1416.5	1420.4	1421.7	1424.3	1417.8
155°	1460.8	1460.8	1462.1	1467.3	1458.2
157.5°	1498.6	1497.3	1498.6	1503.8	1496.0
160°	1533.8	1531.2	1531.2	1537.7	1532.5
162.5°	1565.1	1561.2	1562.5	1569.0	1559.9
165°	1591.1	1587.2	1587.2	1595.0	1585.9
167.5°	1613.3	1608.1	1609.4	1617.2	1609.4
170°	1631.5	1626.3	1626.3	1635.4	1626.3
172.5°	1645.9	1640.6	1640.6	1648.5	1639.3
175°	1655.0	1649.8	1649.8	1657.6	1648.5
177.5°	1660.2	1655.0	1655.0	1662.8	1653.7
180°	1658.9	1658.9	1658.9	1658.9	1658.9

(END OF REPORT)