

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: P1031875

Luminaire Tested: S123DIW-B775D1320UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031875
REPORT IS A COMBINATION OF REPORTS P991938 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1320UB30-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

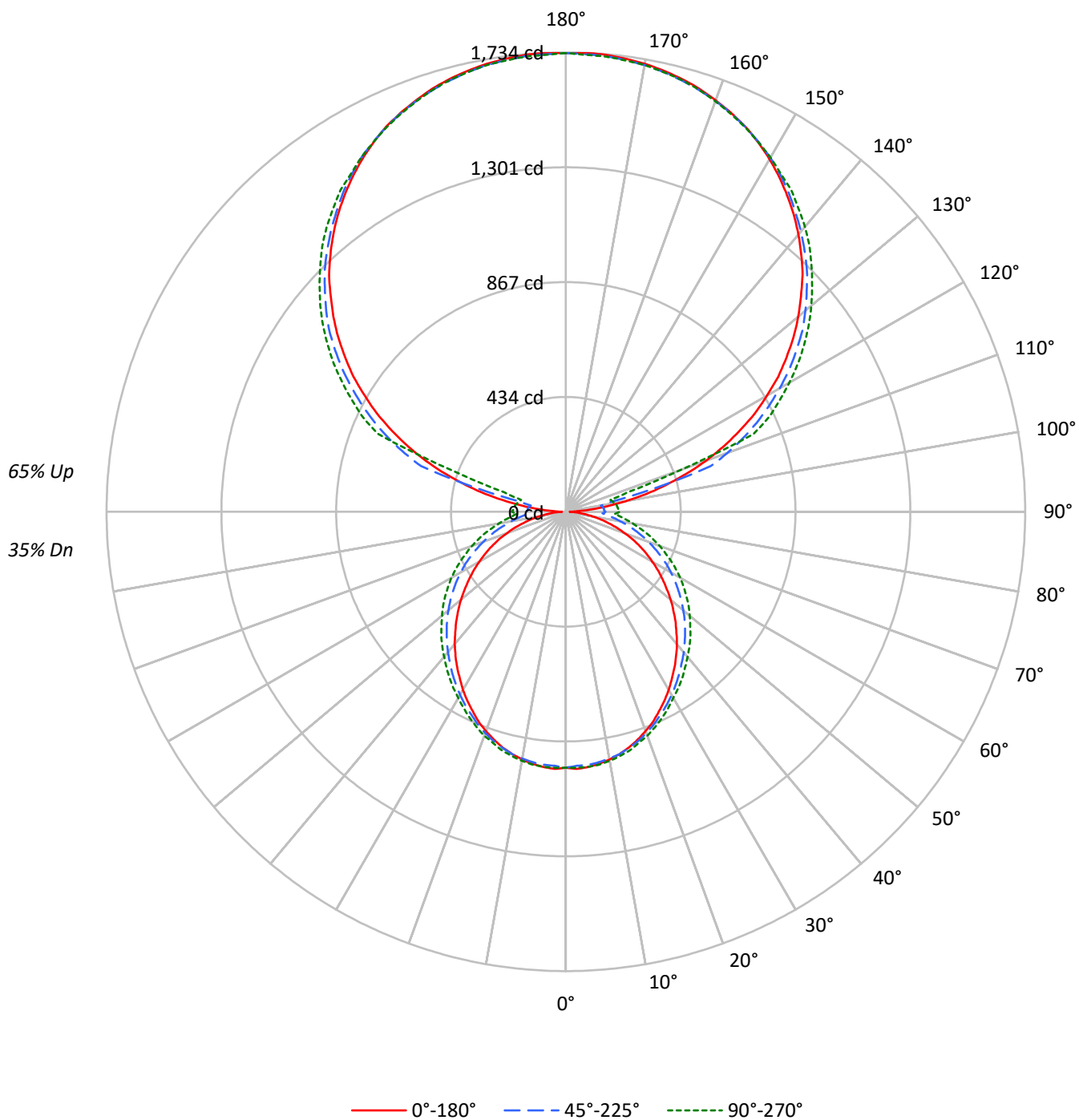
Lumens per Lamp: N/A
Luminaire Lumens: 8529.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	89	85	81	84	81	77	74	64	62	60	50	48	47	36	35	34
2	85	77	71	66	76	70	65	60	56	52	49	43	41	38	31	30	28
3	77	68	60	54	69	61	55	50	49	45	41	38	35	32	28	25	24
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20
5	65	53	45	39	58	48	41	36	39	34	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	26	27	23	20	20	17	15
7	55	43	35	29	49	39	32	27	31	26	22	25	21	18	18	15	13
8	51	39	31	26	46	35	28	24	29	23	20	22	19	16	17	14	12
9	47	35	28	23	42	32	25	21	26	21	18	21	17	14	15	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10399	10399	10399
5°	10428	10094	10086
10°	10330	9820	9746
15°	10194	9519	9385
20°	9999	9182	8997
25°	9760	8803	8596
30°	9516	8460	8193
35°	9243	8101	7865
40°	8980	7771	7518
45°	8691	7453	7232
50°	8404	7136	6922
55°	8085	6814	6637
60°	7775	6482	6345
65°	7455	6129	6002
70°	6973	5733	5650
75°	6364	5281	5285
80°	5657	4825	4870
85°	4956	4456	4573

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8691 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	1.1
10°-20°	261.3	3.1
20°-30°	390.7	4.6
30°-40°	466.5	5.5
40°-50°	488.1	5.7
50°-60°	458.0	5.4
60°-70°	382.6	4.5
70°-80°	273.6	3.2
80°-90°	166.3	1.9
90°-100°	163.4	1.9
100°-110°	370.4	4.3
110°-120°	773.6	9.1
120°-130°	947.0	11.1
130°-140°	993.9	11.7
140°-150°	920.1	10.8
150°-160°	740.0	8.7
160°-170°	477.5	5.6
170°-180°	164.6	1.9
0°-30°	743.6	8.7
0°-40°	1210.1	14.2
0°-60°	2156.2	25.3
0°-90°	2978.6	34.9
90°-120°	1307.4	15.3
90°-150°	4168.4	48.9
90°-180°	5550.0	65.1
0°-180°	8529.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	967	965	959	967	966	92
15°	921	924	923	934	932	259
25°	831	842	845	859	859	383
35°	716	732	746	762	766	448
45°	585	610	637	657	665	451
55°	446	481	519	547	556	400
65°	308	349	396	427	438	305
75°	167	217	269	304	317	179
85°	52	104	160	196	206	53
90°	15	80	150	191	204	14
95°	90	78	144	186	196	103
105°	392	431	361	162	174	415
115°	724	745	794	832	846	716
125°	1017	1027	1063	1088	1097	909
135°	1264	1271	1287	1310	1312	973
145°	1457	1465	1468	1479	1483	912
155°	1604	1602	1603	1609	1602	739
165°	1692	1688	1686	1697	1688	478
175°	1732	1725	1726	1735	1725	165
180°	1732	1732	1732	1732	1732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	966.1	966.1	966.1	966.1	966.1
2.5°	971.4	968.2	959.8	968.2	967.2
5°	967.2	965.1	958.8	967.2	966.1
7.5°	959.8	959.8	953.5	964.0	963.0
10°	949.3	951.4	946.1	956.7	954.6
12.5°	936.7	939.8	936.7	946.1	944.0
15°	920.9	924.0	923.0	933.5	932.5
17.5°	901.9	908.3	907.2	916.7	914.6
20°	880.9	887.2	889.3	898.8	899.8
22.5°	858.8	865.1	868.3	880.9	879.8
25°	831.4	842.0	845.1	858.8	858.8
27.5°	805.1	816.7	823.0	834.6	835.6
30°	776.7	790.4	798.8	811.4	811.4
32.5°	745.1	760.9	772.5	786.2	789.3
35°	715.7	732.5	746.2	762.0	766.2
37.5°	684.1	703.0	718.8	736.7	739.9
40°	652.5	671.5	692.5	710.4	714.6
42.5°	617.8	642.0	664.1	684.1	690.4
45°	585.2	610.4	636.7	656.7	665.1
47.5°	550.4	578.8	608.3	630.4	636.7
50°	516.8	546.2	578.8	603.1	610.4
52.5°	481.0	512.5	549.4	574.6	584.1
55°	446.2	481.0	518.9	547.3	555.7
57.5°	412.6	448.3	489.4	517.8	527.3
60°	376.8	414.7	457.8	487.3	498.9
62.5°	343.1	382.0	428.3	457.8	468.3
65°	308.4	349.4	395.7	427.3	437.8
67.5°	273.6	316.8	363.1	397.8	406.2
70°	236.8	282.1	332.6	366.3	376.8
72.5°	203.1	248.4	301.0	335.7	346.3
75°	167.3	216.8	269.4	304.2	316.8
77.5°	136.8	186.3	238.9	275.7	285.2
80°	104.2	155.8	210.5	246.3	256.8
82.5°	75.8	128.4	184.2	220.0	230.5
85°	51.6	104.2	160.0	195.8	206.3
87.5°	31.6	84.2	137.9	173.7	184.2
90°	15.0	79.5	149.8	190.7	203.8
92.5°	42.2	79.8	143.9	187.7	198.4
95°	90.1	78.3	144.1	185.7	196.2
97.5°	153.3	155.2	139.1	181.0	192.7
100°	226.9	286.3	134.1	174.8	186.6
102.5°	310.7	356.9	180.4	167.4	180.5
105°	391.7	431.2	360.6	162.4	174.5
107.5°	476.9	510.6	573.0	403.3	244.3
110°	562.0	591.3	647.6	632.4	456.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	644.3	668.1	722.2	760.2	767.0
115°	724.4	744.7	794.2	832.2	845.9
117.5°	804.1	821.5	863.8	899.3	909.0
120°	876.4	893.2	931.8	966.3	973.7
122.5°	951.0	962.1	999.8	1029.5	1038.1
125°	1016.9	1027.2	1062.8	1087.5	1097.4
127.5°	1083.8	1093.0	1125.7	1150.6	1155.4
130°	1145.5	1154.7	1180.9	1206.1	1209.8
132.5°	1203.6	1213.9	1233.5	1257.6	1261.1
135°	1264.0	1270.8	1287.4	1310.3	1311.6
137.5°	1315.5	1324.8	1334.7	1358.0	1360.6
140°	1366.0	1373.7	1380.6	1401.6	1404.3
142.5°	1413.5	1420.2	1424.0	1441.6	1442.9
145°	1457.3	1465.2	1467.8	1478.7	1482.9
147.5°	1498.6	1505.1	1507.6	1513.4	1511.2
150°	1537.2	1541.1	1543.7	1546.2	1544.5
152.5°	1572.0	1573.2	1574.5	1579.7	1573.2
155°	1604.1	1601.5	1602.8	1609.3	1601.5
157.5°	1629.8	1629.8	1628.6	1636.3	1626.0
160°	1653.0	1651.7	1650.4	1658.1	1649.1
162.5°	1674.9	1671.0	1669.7	1678.7	1671.0
165°	1691.6	1687.7	1686.4	1696.7	1687.7
167.5°	1705.7	1700.6	1700.6	1710.9	1700.6
170°	1717.3	1712.2	1712.2	1722.5	1712.2
172.5°	1725.0	1718.6	1719.9	1730.2	1718.6
175°	1731.5	1725.0	1726.3	1735.3	1725.0
177.5°	1734.0	1727.6	1728.9	1739.2	1726.3
180°	1731.5	1731.5	1731.5	1731.5	1731.5

(END OF REPORT)