

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: P1030959

Luminaire Tested: S123DIW-B775D1320UB2750-4F0-XX-W2A-D1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030959
REPORT IS A COMBINATION OF REPORTS P991921 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1320UB2750-4F0-XX-W2A-D1_5000K
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

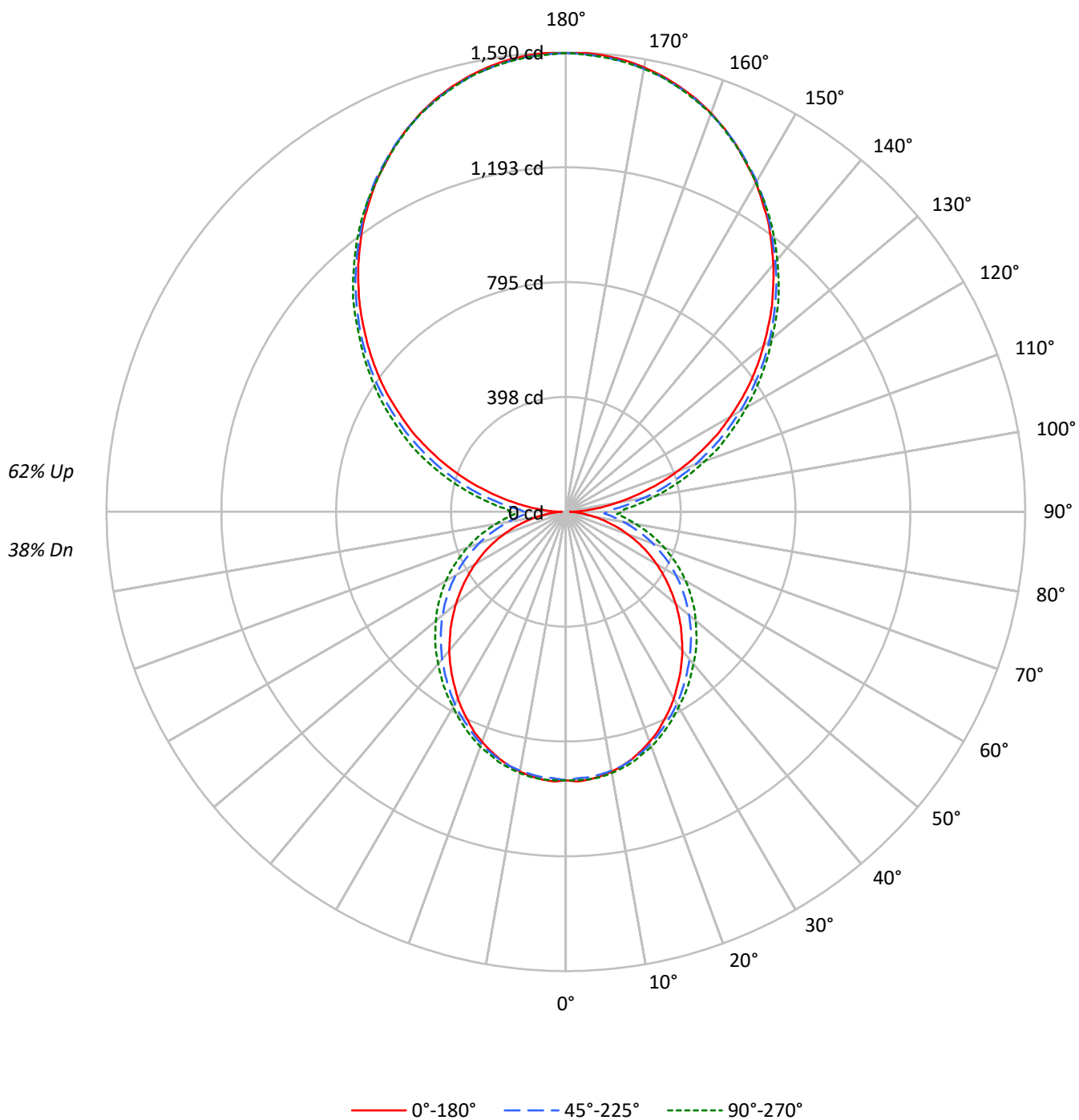
Lumens per Lamp: N/A
Luminaire Lumens: 7527.0 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	95	95	95	95		77	77	77		60	60	60		45	45	45
1	94	90	86	82	85	81	78	75		66	63	61		52	50	48		39	38	36
2	86	78	72	66	77	71	65	61		57	53	50		45	42	40		34	32	30
3	78	68	61	55	70	62	55	50		50	46	42		39	36	33		29	27	25
4	71	60	52	46	64	55	48	42		44	39	35		35	31	28		26	24	22
5	65	53	45	39	59	49	41	36		40	34	30		31	27	24		23	21	19
6	60	48	40	34	54	43	36	31		36	30	26		28	24	21		21	18	16
7	55	43	35	29	50	39	32	27		32	27	23		26	22	19		19	17	14
8	51	39	31	26	46	36	29	24		29	24	20		23	19	16		18	15	13
9	48	35	28	23	43	32	26	21		27	22	18		21	17	15		16	14	12
10	44	32	25	20	40	30	23	19		25	20	16		20	16	13		15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10002	10002	10002
5°	10030	9709	9701
10°	9936	9446	9374
15°	9804	9155	9027
20°	9618	8832	8654
25°	9388	8467	8268
30°	9152	8137	7880
35°	8889	7791	7564
40°	8637	7475	7231
45°	8358	7168	6956
50°	8082	6864	6658
55°	7777	6552	6384
60°	7478	6234	6102
65°	7170	5895	5773
70°	6708	5515	5434
75°	6121	5079	5083
80°	5440	4642	4684
85°	4764	4286	4397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8358 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	1.2
10°-20°	251.3	3.3
20°-30°	375.8	5.0
30°-40°	448.7	6.0
40°-50°	469.4	6.2
50°-60°	440.5	5.9
60°-70°	368.0	4.9
70°-80°	263.1	3.5
80°-90°	159.9	2.1
90°-100°	200.6	2.7
100°-110°	381.7	5.1
110°-120°	575.1	7.6
120°-130°	720.6	9.6
130°-140°	791.4	10.5
140°-150°	768.4	10.2
150°-160°	644.8	8.6
160°-170°	429.2	5.7
170°-180°	150.3	2.0
0°-30°	715.2	9.5
0°-40°	1163.9	15.5
0°-60°	2073.9	27.6
0°-90°	2864.9	38.1
90°-120°	1157.4	15.4
90°-150°	3437.8	45.7
90°-180°	4662.0	61.9
0°-180°	7527.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	929	929	929	929	929	
5°	930	928	922	930	929	88
15°	886	889	888	898	897	250
25°	800	810	813	826	826	369
35°	688	704	718	733	737	430
45°	563	587	612	632	640	434
55°	429	463	499	526	534	384
65°	297	336	381	411	421	293
75°	161	208	259	292	305	172
85°	50	100	154	188	198	51
90°	14	76	144	184	196	15
95°	85	133	192	229	239	90
105°	289	316	370	399	410	309
115°	535	551	585	611	618	530
125°	779	783	810	826	828	695
135°	1009	1015	1025	1038	1041	777
145°	1222	1224	1228	1234	1234	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°	929.2	929.2	929.2	929.2	929.2
2.5°	934.3	931.3	923.2	931.3	930.3
5°	930.3	928.2	922.2	930.3	929.2
7.5°	923.2	923.2	917.1	927.2	926.2
10°	913.1	915.1	910.0	920.1	918.1
12.5°	900.9	903.9	900.9	910.0	908.0
15°	885.7	888.8	887.7	897.9	896.9
17.5°	867.5	873.6	872.6	881.7	879.6
20°	847.3	853.3	855.4	864.5	865.5
22.5°	826.0	832.1	835.1	847.3	846.2
25°	799.7	809.8	812.8	826.0	826.0
27.5°	774.4	785.5	791.6	802.7	803.7
30°	747.0	760.2	768.3	780.4	780.4
32.5°	716.7	731.9	743.0	756.2	759.2
35°	688.3	704.5	717.7	732.9	736.9
37.5°	658.0	676.2	691.4	708.6	711.6
40°	627.6	645.8	666.1	683.3	687.3
42.5°	594.2	617.5	638.7	658.0	664.0
45°	562.8	587.1	612.4	631.6	639.7
47.5°	529.4	556.7	585.1	606.3	612.4
50°	497.0	525.4	556.7	580.0	587.1
52.5°	462.6	493.0	528.4	552.7	561.8
55°	429.2	462.6	499.0	526.4	534.5
57.5°	396.8	431.2	470.7	498.0	507.1
60°	362.4	398.8	440.3	468.7	479.8
62.5°	330.0	367.4	412.0	440.3	450.5
65°	296.6	336.1	380.6	411.0	421.1
67.5°	263.2	304.7	349.2	382.6	390.7
70°	227.8	271.3	319.9	352.3	362.4
72.5°	195.4	238.9	289.5	322.9	333.0
75°	160.9	208.5	259.1	292.5	304.7
77.5°	131.6	179.2	229.8	265.2	274.3
80°	100.2	149.8	202.5	236.9	247.0
82.5°	72.9	123.5	177.1	211.6	221.7
85°	49.6	100.2	153.9	188.3	198.4
87.5°	30.4	81.0	132.6	167.0	177.1
90°	14.4	76.5	144.3	183.7	196.3
92.5°	49.5	100.6	158.7	195.8	202.4
95°	84.7	132.9	192.5	228.9	239.0
97.5°	131.1	173.9	228.8	265.5	274.3
100°	178.8	218.7	271.5	304.5	317.1
102.5°	233.9	266.0	320.3	352.3	361.3
105°	288.8	315.6	370.3	398.7	410.3
107.5°	352.7	375.1	421.6	452.8	460.6
110°	411.6	432.3	475.3	506.6	512.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	474.0	489.3	527.8	559.3	568.4
115°	535.3	551.2	585.1	610.6	617.5
117.5°	599.0	608.3	640.2	664.5	668.9
120°	656.5	669.1	696.2	718.3	722.9
122.5°	717.6	724.7	753.6	772.1	775.4
125°	779.0	782.8	809.7	825.9	828.0
127.5°	836.4	842.9	865.7	878.5	880.6
130°	893.8	902.8	919.3	933.5	930.9
132.5°	950.2	960.2	972.9	984.8	985.7
135°	1008.8	1015.3	1025.2	1038.5	1041.0
137.5°	1062.5	1067.7	1078.6	1088.5	1089.9
140°	1117.6	1123.9	1128.1	1142.1	1138.4
142.5°	1168.8	1174.0	1176.5	1188.5	1187.2
145°	1222.4	1223.9	1227.7	1234.5	1233.5
147.5°	1267.6	1272.6	1276.3	1279.3	1275.9
150°	1316.2	1318.7	1321.2	1321.2	1315.7
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)