

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: P1031896

Luminaire Tested: S123DIW-B775D1320UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031896
REPORT IS A COMBINATION OF REPORTS P991969 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1320UB50-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

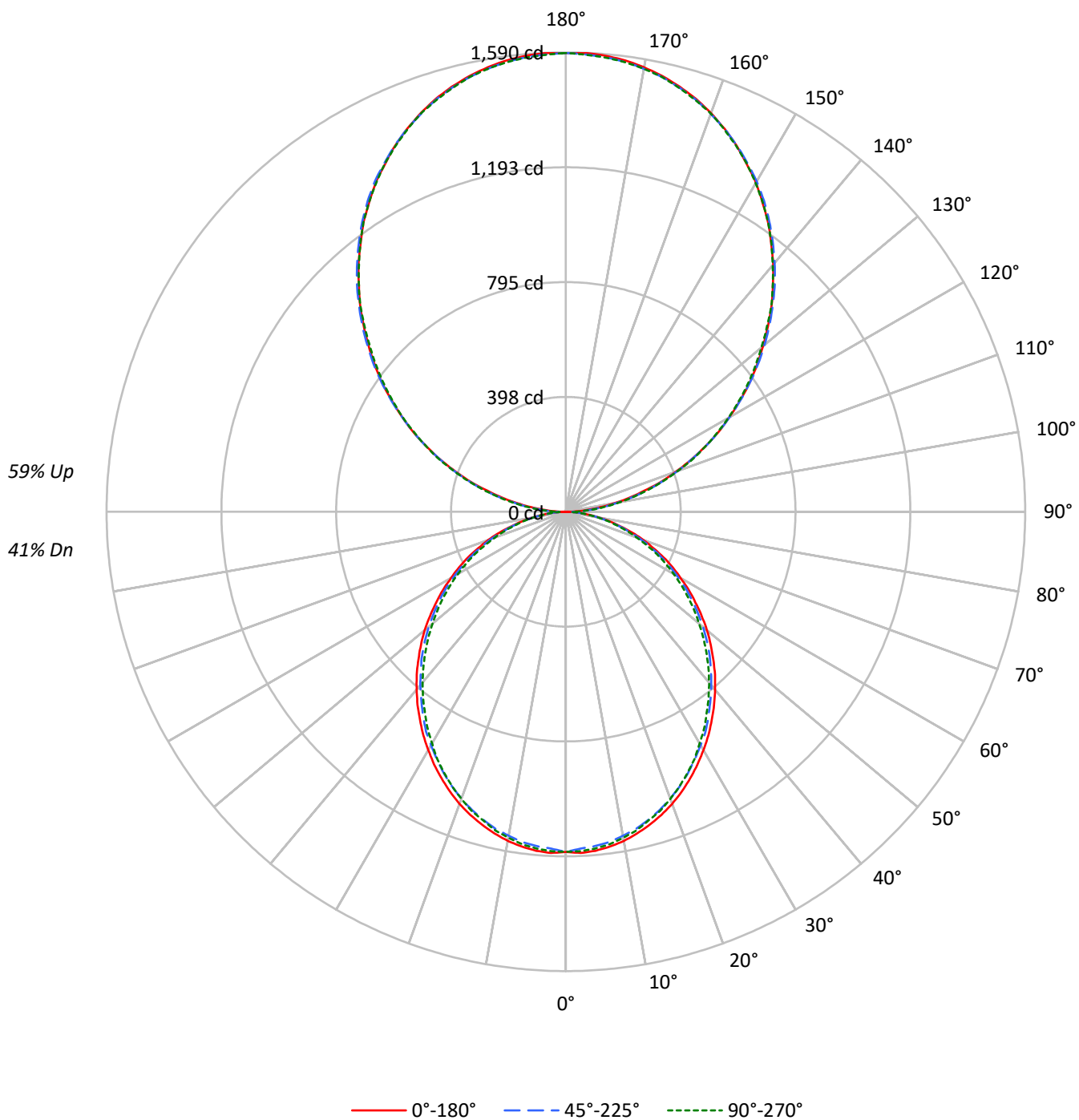
Lumens per Lamp: N/A
Luminaire Lumens: 7467.0 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	50	30	10
RCR																				
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41		
1	96	91	88	84	87	83	80	77	69	66	64	55	53	52	42	41	40	34		
2	87	80	74	69	79	73	68	63	60	56	53	48	46	43	37	35	34	29		
3	79	70	63	57	72	64	58	53	53	48	45	43	39	37	33	31	29	24		
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	21		
5	67	55	47	41	60	51	44	38	42	37	33	34	30	27	26	24	22	18		
6	61	49	41	36	56	45	38	33	38	32	28	31	27	24	24	21	19	16		
7	57	45	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14		
8	52	40	33	27	48	37	30	26	31	26	22	25	21	19	20	17	15	13		
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	19	16	14	11		
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	14	12	10		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12668	12668	12668
5°	12699	12231	12212
10°	12587	11818	11695
15°	12412	11387	11133
20°	12211	10909	10574
25°	11951	10404	9978
30°	11668	9882	9350
35°	11370	9349	8726
40°	11058	8790	8112
45°	10715	8244	7471
50°	10367	7636	6828
55°	9920	7003	6176
60°	9459	6305	5482
65°	9026	5548	4759
70°	8405	4710	3915
75°	7505	3730	3040
80°	6482	2622	2149
85°	5052	1409	1077

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10715 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	1.5
10°-20°	313.3	4.2
20°-30°	462.7	6.2
30°-40°	540.4	7.2
40°-50°	543.3	7.3
50°-60°	477.2	6.4
60°-70°	355.4	4.8
70°-80°	202.3	2.7
80°-90°	60.9	0.8
90°-100°	102.2	1.4
100°-110°	309.4	4.1
110°-120°	526.8	7.1
120°-130°	693.0	9.3
130°-140°	779.0	10.4
140°-150°	765.8	10.3
150°-160°	644.8	8.6
160°-170°	429.2	5.7
170°-180°	150.3	2.0
0°-30°	886.9	11.9
0°-40°	1427.3	19.1
0°-60°	2447.8	32.8
0°-90°	3066.4	41.1
90°-120°	938.5	12.6
90°-150°	3176.3	42.5
90°-180°	4401.0	58.9
0°-180°	7467.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1178	1173	1162	1172	1170	112
15°	1121	1117	1104	1112	1106	316
25°	1018	1012	999	1000	997	469
35°	880	874	861	855	850	551
45°	722	718	704	692	687	557
55°	548	546	533	522	517	490
65°	373	368	358	350	347	368
75°	197	193	190	185	182	211
85°	53	51	51	49	49	56
90°	1	14	30	35	37	9
95°	74	82	92	97	97	81
105°	281	283	294	294	297	301
115°	530	534	532	533	532	525
125°	776	780	777	772	767	692
135°	1007	1014	1013	1008	1006	776
145°	1221	1224	1228	1226	1221	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°	1176.9	1176.9	1176.9	1176.9	1176.9
2.5°	1182.0	1177.9	1166.8	1176.9	1175.9
5°	1177.9	1172.9	1161.7	1171.9	1169.8
7.5°	1168.8	1163.8	1152.6	1161.7	1160.7
10°	1156.7	1151.6	1138.5	1147.6	1145.5
12.5°	1140.5	1136.4	1124.3	1130.4	1129.4
15°	1121.3	1117.2	1104.1	1112.2	1106.1
17.5°	1100.0	1095.0	1081.8	1087.9	1085.8
20°	1075.7	1069.7	1056.5	1060.5	1057.5
22.5°	1048.4	1042.3	1029.2	1032.2	1028.2
25°	1018.0	1012.0	998.8	999.8	996.8
27.5°	986.7	980.6	966.4	967.4	964.4
30°	952.3	947.2	933.0	933.0	926.0
32.5°	917.9	910.8	900.7	893.6	890.5
35°	880.4	874.3	861.2	855.1	850.1
37.5°	843.0	834.9	821.7	814.6	811.6
40°	803.5	797.4	783.3	775.2	771.1
42.5°	764.0	757.0	742.8	734.7	730.6
45°	721.5	717.5	704.3	692.2	687.1
47.5°	680.0	674.0	661.8	649.7	645.6
50°	637.5	632.5	619.3	608.2	602.1
52.5°	593.0	590.0	575.8	566.7	560.6
55°	547.5	546.5	533.3	522.2	517.1
57.5°	505.0	500.9	490.8	480.7	474.6
60°	458.4	457.4	445.3	436.2	431.1
62.5°	416.9	413.9	401.8	392.6	389.6
65°	373.4	368.4	358.2	350.1	347.1
67.5°	326.9	322.8	314.7	307.6	303.6
70°	285.4	279.3	273.2	266.1	261.1
72.5°	241.9	237.8	230.7	224.7	222.6
75°	197.3	193.3	190.3	185.2	182.2
77.5°	157.9	155.8	151.8	147.7	147.7
80°	119.4	116.4	114.4	113.3	113.3
82.5°	82.0	82.0	82.0	79.9	78.9
85°	52.6	50.6	50.6	48.6	48.6
87.5°	26.3	23.3	22.3	21.3	21.3
90°	1.2	13.7	29.9	34.9	37.4
92.5°	37.4	44.9	52.4	56.1	53.6
95°	73.6	82.3	92.3	97.3	97.3
97.5°	121.0	127.3	134.7	141.0	139.7
100°	169.7	177.2	183.4	187.1	189.6
102.5°	225.8	229.6	238.3	242.0	240.8
105°	280.7	283.2	294.4	294.4	296.9
107.5°	345.6	346.8	351.8	355.6	354.3
110°	405.5	408.0	410.5	415.5	413.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	467.9	469.1	469.1	475.3	475.3
115°	530.2	534.0	531.5	532.7	531.5
117.5°	593.9	595.1	592.6	592.6	588.9
120°	652.5	660.0	653.7	652.5	650.0
122.5°	713.6	718.6	716.1	712.4	708.6
125°	776.0	779.8	777.3	772.3	767.3
127.5°	833.4	840.9	838.4	830.9	825.9
130°	890.8	900.8	897.0	892.0	883.3
132.5°	948.2	958.2	955.7	949.4	943.2
135°	1006.8	1014.3	1013.1	1008.1	1005.6
137.5°	1060.5	1066.7	1070.5	1064.2	1060.5
140°	1116.6	1122.9	1124.1	1122.9	1114.1
142.5°	1167.8	1174.0	1176.5	1175.3	1169.0
145°	1221.4	1223.9	1227.7	1226.4	1221.4
147.5°	1267.6	1272.6	1276.3	1276.3	1268.8
150°	1316.2	1318.7	1321.2	1321.2	1313.7
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)