

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: P1031876

Luminaire Tested: S123DIW-B775D1320UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031876
REPORT IS A COMBINATION OF REPORTS P991939 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-D1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

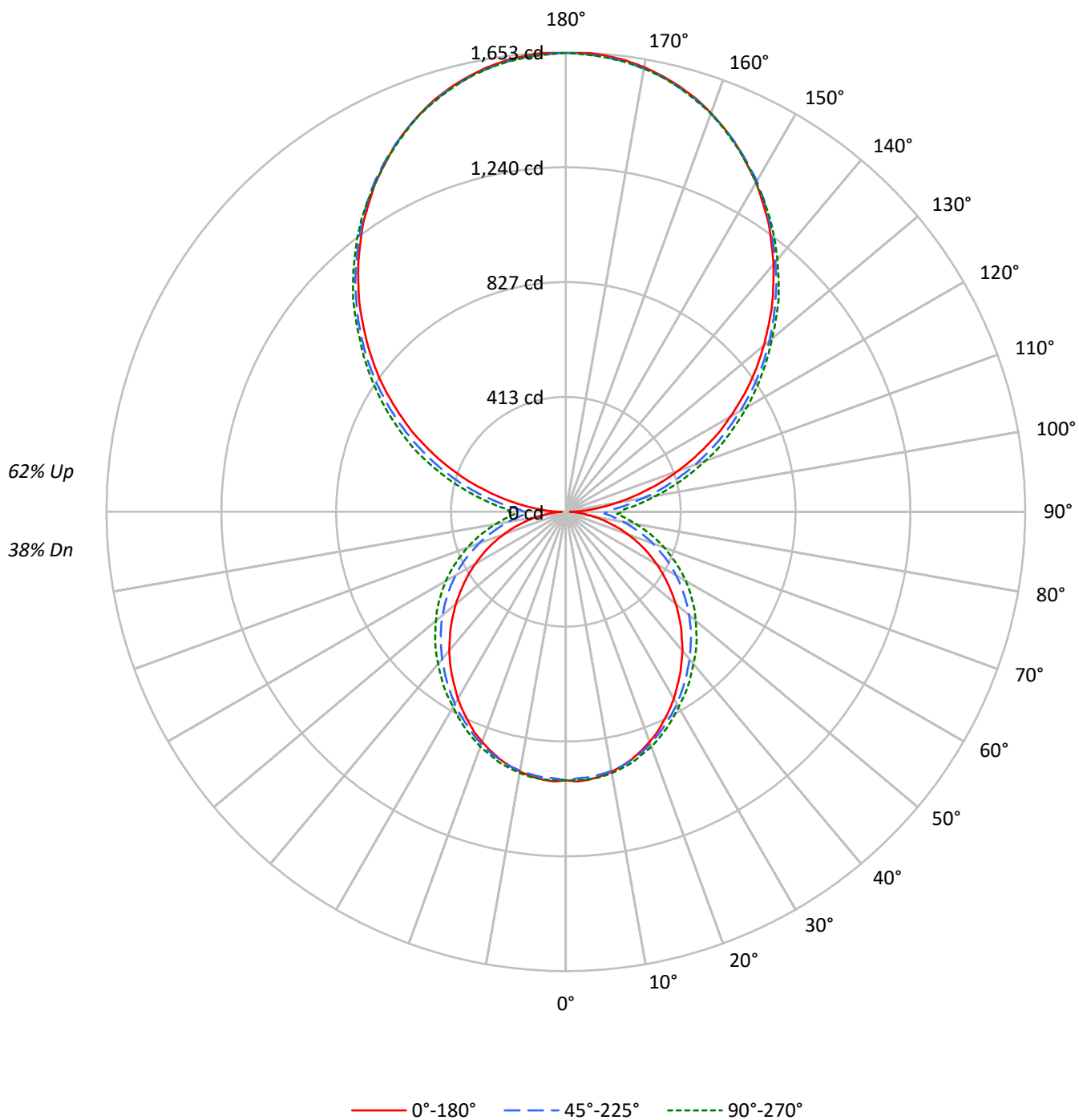
Lumens per Lamp: N/A
Luminaire Lumens: 7827.0 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	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	33	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°	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	1.2
10°-20°	261.3	3.3
20°-30°	390.7	5.0
30°-40°	466.5	6.0
40°-50°	488.1	6.2
50°-60°	458.0	5.9
60°-70°	382.6	4.9
70°-80°	273.6	3.5
80°-90°	166.3	2.1
90°-100°	208.6	2.7
100°-110°	397.0	5.1
110°-120°	598.0	7.6
120°-130°	749.4	9.6
130°-140°	823.0	10.5
140°-150°	799.1	10.2
150°-160°	670.5	8.6
160°-170°	446.4	5.7
170°-180°	156.3	2.0
0°-30°	743.6	9.5
0°-40°	1210.1	15.5
0°-60°	2156.2	27.5
0°-90°	2978.6	38.1
90°-120°	1203.6	15.4
90°-150°	3575.1	45.7
90°-180°	4848.0	61.9
0°-180°	7827.0	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	15
95°	88	138	200	238	248	93
105°	300	328	385	415	427	321
115°	557	573	608	635	642	551
125°	810	814	842	859	861	723
135°	1049	1056	1066	1080	1083	808
145°	1271	1273	1277	1284	1283	794
155°	1454	1454	1456	1461	1452	670
165°	1584	1580	1580	1588	1579	447
175°	1648	1643	1643	1650	1641	157
180°	1652	1652	1652	1652	1652	

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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	79.6	150.0	191.0	204.1
92.5°	51.5	104.6	165.0	203.6	210.5
95°	88.2	138.2	200.2	238.0	248.5
97.5°	136.4	180.7	238.0	276.1	285.3
100°	186.0	227.4	282.3	316.7	329.8
102.5°	243.2	276.6	333.0	366.4	375.6
105°	300.3	328.2	385.1	414.6	426.7
107.5°	366.8	390.2	438.5	470.8	479.0
110°	428.0	449.6	494.3	526.8	532.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	492.9	508.8	548.8	581.7	591.1
115°	556.7	573.2	608.5	635.0	642.2
117.5°	622.9	632.6	665.8	691.0	695.5
120°	682.8	695.9	724.1	747.0	751.8
122.5°	746.4	753.6	783.6	803.0	806.5
125°	810.2	814.1	842.0	858.9	861.0
127.5°	869.9	876.6	900.3	913.6	915.7
130°	929.6	938.9	956.1	970.9	968.1
132.5°	988.2	998.6	1011.8	1024.2	1025.1
135°	1049.2	1055.9	1066.1	1080.0	1082.6
137.5°	1105.0	1110.4	1121.6	1132.0	1133.4
140°	1162.3	1168.8	1173.2	1187.7	1183.9
142.5°	1215.5	1220.9	1223.5	1235.9	1234.6
145°	1271.3	1272.8	1276.7	1283.8	1282.8
147.5°	1318.2	1323.4	1327.3	1330.5	1326.9
150°	1368.8	1371.4	1374.0	1374.0	1368.3
152.5°	1410.4	1414.2	1415.5	1418.1	1411.6
155°	1454.5	1454.5	1455.8	1461.0	1451.9
157.5°	1492.1	1490.8	1492.1	1497.3	1489.5
160°	1527.1	1524.5	1524.5	1531.0	1525.8
162.5°	1558.3	1554.4	1555.7	1562.2	1553.1
165°	1584.2	1580.3	1580.3	1588.1	1579.0
167.5°	1606.3	1601.1	1602.4	1610.2	1602.4
170°	1624.4	1619.2	1619.2	1628.3	1619.2
172.5°	1638.7	1633.5	1633.5	1641.3	1632.2
175°	1647.8	1642.6	1642.6	1650.4	1641.3
177.5°	1653.0	1647.8	1647.8	1655.6	1646.5
180°	1651.7	1651.7	1651.7	1651.7	1651.7

(END OF REPORT)