

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: P1032404

Luminaire Tested: S123RDIW-B775D1320UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032404
REPORT IS A COMBINATION OF REPORTS P994684 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B775D1320UB50-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

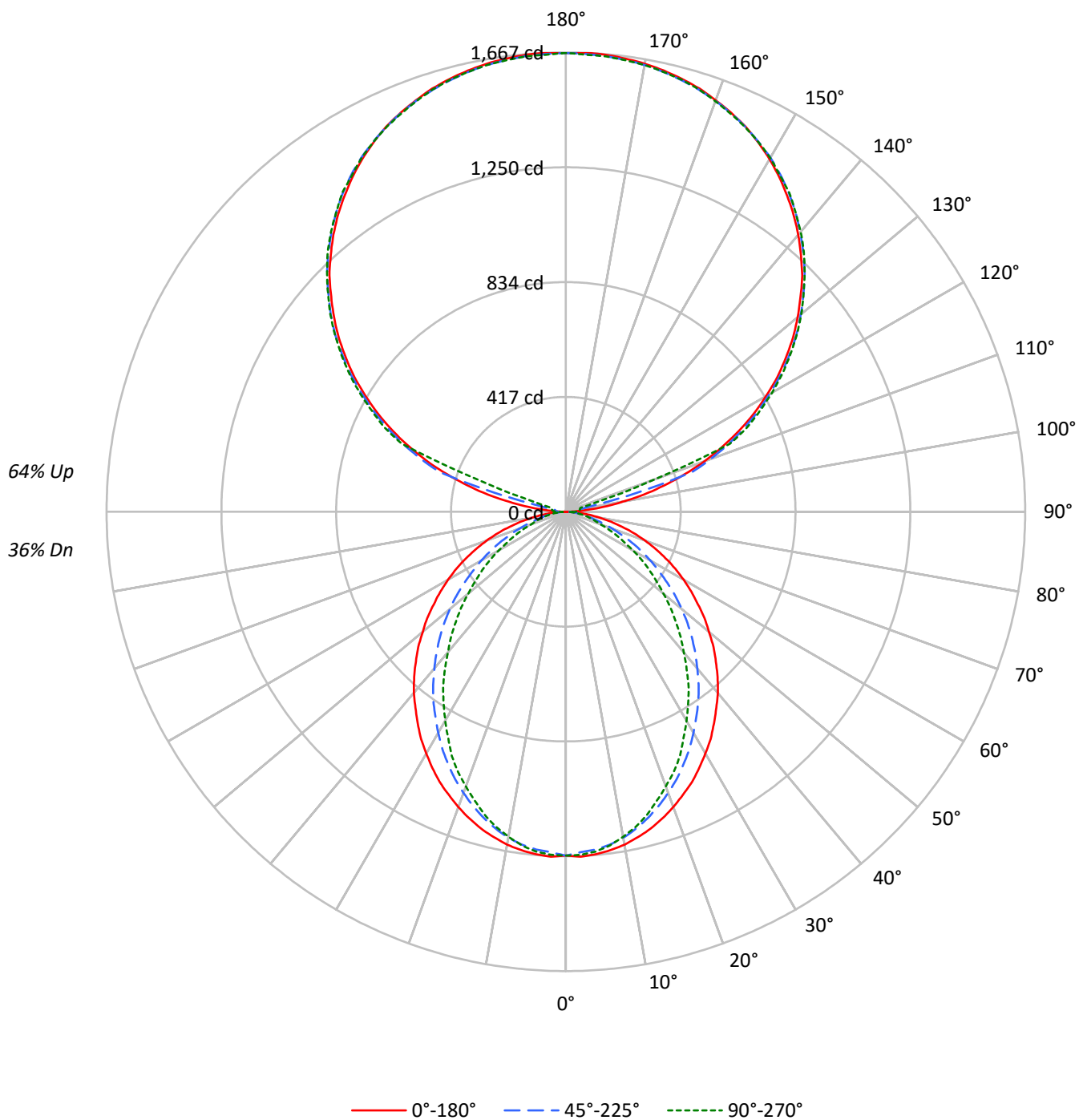
Lumens per Lamp: N/A
Luminaire Lumens: 7898.0 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	59	59	59	43	43	43
1	95	91	87	84	86	82	79	76	66	64	62	52	50	49	38	38	37
2	87	79	74	69	78	72	67	63	58	55	52	46	43	41	34	33	31
3	79	70	63	57	71	64	58	53	52	47	44	41	38	35	30	28	27
4	72	62	54	49	65	56	50	45	46	41	37	36	33	30	27	25	23
5	66	55	47	42	60	50	44	39	41	36	32	33	29	26	25	22	20
6	61	50	42	36	55	45	38	33	37	32	28	29	26	23	22	20	18
7	57	45	37	32	51	41	34	29	34	29	25	27	23	20	20	18	16
8	52	40	33	28	47	37	31	26	31	26	22	25	21	18	19	16	14
9	49	37	30	25	44	34	27	23	28	23	20	23	19	16	17	15	13
10	45	34	27	22	41	31	25	21	26	21	18	21	17	15	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13431	13431	13431
5°	13453	12956	12921
10°	13347	12468	12223
15°	13174	11866	11459
20°	12946	11212	10605
25°	12712	10531	9795
30°	12412	9808	8839
35°	12102	9096	7968
40°	11811	8324	7005
45°	11437	7570	6140
50°	11025	6763	5245
55°	10598	5900	4424
60°	10191	5015	3590
65°	9662	4106	2802
70°	9000	3105	2003
75°	8045	2103	1587
80°	6868	1462	1113
85°	5149	788	583

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11437 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.3	1.5
10°-20°	326.3	4.1
20°-30°	469.8	5.9
30°-40°	529.1	6.7
40°-50°	506.1	6.4
50°-60°	414.3	5.2
60°-70°	279.3	3.5
70°-80°	140.1	1.8
80°-90°	39.9	0.5
90°-100°	58.7	0.7
100°-110°	283.9	3.6
110°-120°	695.6	8.8
120°-130°	883.1	11.2
130°-140°	943.4	11.9
140°-150°	882.1	11.2
150°-160°	711.5	9.0
160°-170°	459.2	5.8
170°-180°	158.2	2.0
0°-30°	913.4	11.6
0°-40°	1442.6	18.3
0°-60°	2363.0	29.9
0°-90°	2822.3	35.7
90°-120°	1038.2	13.1
90°-150°	3746.7	47.4
90°-180°	5076.0	64.3
0°-180°	7898.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1248	1243	1231	1240	1238	118
15°	1190	1179	1151	1146	1138	335
25°	1083	1058	1011	990	979	498
35°	937	901	838	794	776	587
45°	770	725	647	589	565	594
55°	585	535	449	391	370	525
65°	400	344	265	216	204	396
75°	212	163	107	97	95	225
85°	54	31	28	26	26	59
90°	1	14	30	35	37	8
95°	76	25	38	47	47	90
105°	369	382	271	52	54	391
115°	692	699	710	722	727	683
125°	975	985	990	992	994	871
135°	1213	1221	1226	1230	1226	934
145°	1400	1409	1411	1414	1414	877
155°	1542	1540	1541	1547	1540	711
165°	1627	1623	1622	1632	1623	460
175°	1665	1659	1660	1669	1659	158
180°	1665	1665	1665	1665	1665	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.8	1247.8	1247.8	1247.8	1247.8
2.5°	1252.9	1248.8	1236.7	1247.8	1245.8
5°	1247.8	1242.7	1230.6	1239.7	1237.7
7.5°	1238.7	1233.6	1218.5	1224.5	1221.5
10°	1226.5	1219.5	1201.2	1202.3	1197.2
12.5°	1209.3	1201.2	1178.0	1177.0	1170.9
15°	1190.1	1179.0	1150.6	1145.6	1138.5
17.5°	1166.8	1154.7	1119.3	1109.2	1099.0
20°	1140.5	1124.3	1085.9	1072.7	1060.6
22.5°	1111.2	1092.0	1050.5	1033.3	1022.1
25°	1082.8	1057.5	1011.0	989.7	978.6
27.5°	1048.4	1021.1	970.5	942.2	925.0
30°	1013.0	982.7	926.0	891.6	875.4
32.5°	977.6	942.2	881.5	843.0	825.8
35°	937.1	900.7	837.9	794.4	776.2
37.5°	896.6	857.2	791.4	742.8	720.5
40°	858.2	813.7	741.8	689.2	665.9
42.5°	814.7	770.1	695.2	636.5	616.3
45°	770.1	724.6	646.7	589.0	564.7
47.5°	726.6	676.0	599.1	536.4	515.1
50°	678.0	630.5	548.5	485.8	462.5
52.5°	634.5	581.9	500.9	435.2	414.9
55°	584.9	535.3	449.3	390.6	370.4
57.5°	540.4	486.8	399.7	344.1	326.9
60°	493.9	438.2	354.2	299.6	282.3
62.5°	447.3	391.6	307.6	257.0	238.8
65°	399.7	344.1	265.1	215.6	204.4
67.5°	352.2	295.5	218.6	181.1	169.0
70°	305.6	251.0	180.1	144.7	133.6
72.5°	259.1	205.4	142.7	115.4	112.3
75°	211.5	162.9	107.3	97.2	95.1
77.5°	168.0	123.5	84.0	77.9	75.9
80°	126.5	85.0	63.8	60.7	58.7
82.5°	87.0	52.6	45.5	42.5	42.5
85°	53.6	31.4	28.3	26.3	26.3
87.5°	24.3	13.2	13.2	12.1	11.1
90°	1.2	13.6	29.7	34.6	37.1
92.5°	28.4	21.0	32.2	40.8	42.1
95°	75.5	24.7	38.3	47.0	47.0
97.5°	137.3	102.7	39.6	49.5	50.7
100°	209.0	233.8	40.8	50.7	52.0
102.5°	290.7	306.8	91.5	50.7	53.2
105°	368.6	382.2	270.9	52.0	54.4
107.5°	451.5	462.6	481.2	290.7	128.6
110°	534.4	544.3	557.9	517.0	340.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	613.5	622.2	635.8	646.9	644.4
115°	691.5	698.9	710.0	722.4	727.3
117.5°	768.1	776.8	783.0	792.9	794.1
120°	838.6	849.8	853.5	863.4	863.4
122.5°	910.4	919.1	924.0	930.2	931.4
125°	974.7	984.6	989.6	992.0	994.5
127.5°	1039.0	1048.9	1055.1	1058.8	1056.4
130°	1098.4	1108.3	1113.3	1118.2	1115.7
132.5°	1155.3	1165.2	1168.9	1173.9	1170.2
135°	1213.4	1220.9	1225.8	1229.5	1225.8
137.5°	1262.9	1272.8	1275.3	1281.5	1279.0
140°	1312.4	1319.8	1323.5	1328.5	1326.0
142.5°	1358.2	1365.6	1369.3	1373.0	1369.3
145°	1400.2	1408.9	1411.4	1413.8	1413.8
147.5°	1441.0	1447.2	1449.7	1452.2	1446.0
150°	1478.1	1481.9	1484.3	1486.8	1483.1
152.5°	1511.5	1512.8	1514.0	1519.0	1512.8
155°	1542.5	1540.0	1541.2	1547.4	1540.0
157.5°	1567.2	1567.2	1566.0	1573.4	1563.5
160°	1589.5	1588.2	1587.0	1594.4	1585.8
162.5°	1610.5	1606.8	1605.6	1614.2	1606.8
165°	1626.6	1622.9	1621.6	1631.5	1622.9
167.5°	1640.2	1635.2	1635.2	1645.1	1635.2
170°	1651.3	1646.4	1646.4	1656.3	1646.4
172.5°	1658.7	1652.6	1653.8	1663.7	1652.6
175°	1664.9	1658.7	1660.0	1668.6	1658.7
177.5°	1667.4	1661.2	1662.5	1672.3	1660.0
180°	1664.9	1664.9	1664.9	1664.9	1664.9

(END OF REPORT)