

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: P1031229

Luminaire Tested: S123RDIW-B775D1320UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031229
REPORT IS A COMBINATION OF REPORTS P994656 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B775D1320UB2750-4F0-XX-W2A-F1_5000K
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

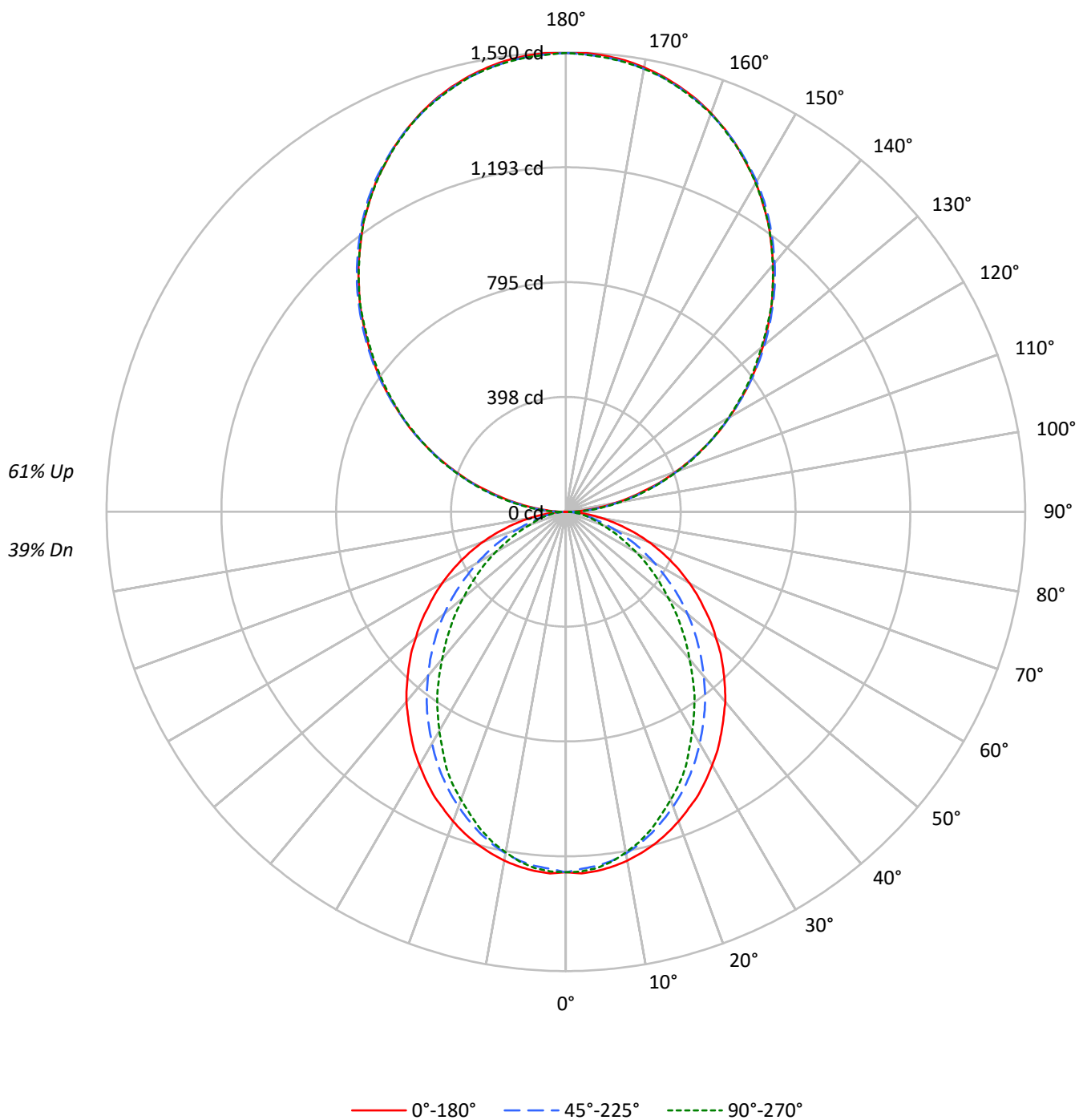
Lumens per Lamp: N/A
Luminaire Lumens: 7223.0 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39		
1	96	91	88	84	87	83	80	77	68	66	64	54	53	51	41	40	39	33		
2	87	80	74	69	79	73	68	64	60	56	53	48	45	43	36	35	34	28		
3	80	71	64	58	72	64	58	54	53	49	45	42	39	37	33	31	29	24		
4	73	63	55	49	66	57	51	46	47	42	38	38	34	32	29	27	25	21		
5	67	56	48	42	61	51	44	39	42	37	33	34	30	28	26	24	22	18		
6	62	50	42	37	56	46	39	34	38	33	29	31	27	24	24	21	19	16		
7	57	45	37	32	52	42	35	30	35	29	26	28	24	21	22	19	17	15		
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16	13		
9	49	37	30	25	45	34	28	24	29	24	20	24	20	17	19	16	14	12		
10	46	34	27	23	42	32	25	21	27	22	18	22	18	16	17	15	13	11		

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	1.6
10°-20°	326.3	4.5
20°-30°	469.8	6.5
30°-40°	529.1	7.3
40°-50°	506.1	7.0
50°-60°	414.3	5.7
60°-70°	279.3	3.9
70°-80°	140.1	1.9
80°-90°	40.0	0.6
90°-100°	102.2	1.4
100°-110°	309.4	4.3
110°-120°	526.8	7.3
120°-130°	693.0	9.6
130°-140°	779.0	10.8
140°-150°	765.8	10.6
150°-160°	644.8	8.9
160°-170°	429.2	5.9
170°-180°	150.3	2.1
0°-30°	913.4	12.6
0°-40°	1442.6	20.0
0°-60°	2363.0	32.7
0°-90°	2822.3	39.1
90°-120°	938.5	13.0
90°-150°	3176.3	44.0
90°-180°	4401.0	60.9
0°-180°	7223.0	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	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°	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	13.7	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)