

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: P1032439

Luminaire Tested: S123RDIW-B775D460UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032439
REPORT IS A COMBINATION OF REPORTS P994767 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B775D460UB40-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

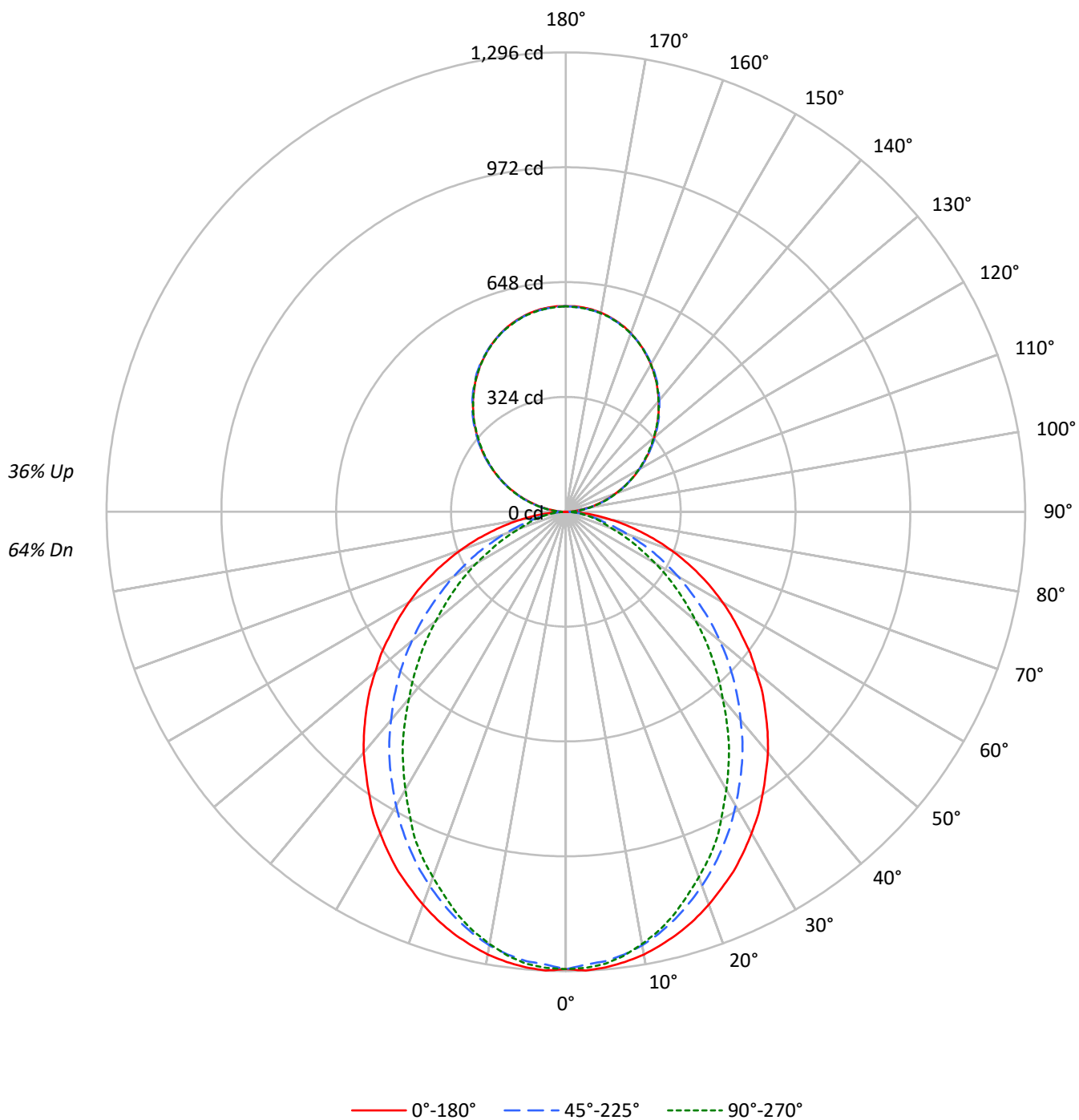
Lumens per Lamp: N/A
Luminaire Lumens: 4523.0 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 49.1
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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69
1	101	97	93	90	95	92	88	85	81	78	76	71	69	68	62	61	60
2	93	85	79	74	87	81	75	71	71	67	64	63	60	57	55	53	51
3	85	75	68	62	80	71	65	60	63	58	54	56	52	49	49	46	44
4	78	67	59	53	73	63	56	51	57	51	46	50	46	42	44	41	38
5	72	60	52	46	67	57	50	44	51	45	40	45	41	37	40	36	33
6	66	54	46	40	62	51	44	39	46	40	36	41	36	32	36	33	30
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	33	29	26
8	57	45	37	32	54	43	35	30	38	32	28	34	30	26	31	27	24
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	28	25	22
10	50	38	30	26	47	36	29	25	33	27	23	29	25	21	26	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13889	13889	13889
5°	13911	13397	13361
10°	13802	12894	12640
15°	13622	12271	11849
20°	13388	11594	10966
25°	13145	10890	10129
30°	12834	10141	9140
35°	12514	9407	8239
40°	12213	8608	7244
45°	11827	7827	6349
50°	11401	6993	5423
55°	10960	6101	4574
60°	10538	5186	3713
65°	9993	4247	2898
70°	9306	3212	2071
75°	8319	2174	1642
80°	7101	1511	1151
85°	5331	816	603

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11827 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.3	2.7
10°-20°	337.4	7.5
20°-30°	485.8	10.7
30°-40°	547.1	12.1
40°-50°	523.3	11.6
50°-60°	428.4	9.5
60°-70°	288.8	6.4
70°-80°	144.9	3.2
80°-90°	39.1	0.9
90°-100°	37.3	0.8
100°-110°	113.0	2.5
110°-120°	192.4	4.3
120°-130°	253.0	5.6
130°-140°	284.4	6.3
140°-150°	279.6	6.2
150°-160°	235.4	5.2
160°-170°	156.7	3.5
170°-180°	54.9	1.2
0°-30°	944.5	20.9
0°-40°	1491.7	33.0
0°-60°	2443.4	54.0
0°-90°	2916.2	64.5
90°-120°	342.7	7.6
90°-150°	1159.8	25.6
90°-180°	1607.0	35.5
0°-180°	4523.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1290	1290	1290	1290	1290	
5°	1290	1285	1272	1282	1280	122
15°	1231	1219	1190	1185	1177	347
25°	1120	1094	1045	1023	1012	515
35°	969	931	866	822	803	607
45°	796	749	669	609	584	615
55°	605	554	465	404	383	542
65°	413	356	274	223	211	409
75°	219	168	111	100	98	233
85°	56	32	29	27	27	61
90°	0	5	11	13	14	5
95°	27	30	34	36	36	30
105°	102	103	108	108	108	110
115°	194	195	194	194	194	192
125°	283	285	284	282	280	253
135°	368	370	370	368	367	283
145°	446	447	448	448	446	279
155°	511	511	511	513	510	235
165°	556	555	555	558	554	157
175°	578	577	577	579	576	55
180°	580	580	580	580	580	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1290.3	1290.3	1290.3	1290.3	1290.3
2.5°	1295.5	1291.3	1278.8	1290.3	1288.2
5°	1290.3	1285.1	1272.5	1281.9	1279.8
7.5°	1280.9	1275.6	1259.9	1266.2	1263.1
10°	1268.3	1261.0	1242.2	1243.2	1238.0
12.5°	1250.5	1242.2	1218.1	1217.0	1210.8
15°	1230.6	1219.1	1189.8	1184.6	1177.3
17.5°	1206.6	1194.0	1157.4	1146.9	1136.5
20°	1179.4	1162.6	1122.9	1109.3	1096.7
22.5°	1149.0	1129.1	1086.2	1068.4	1056.9
25°	1119.7	1093.6	1045.4	1023.4	1011.9
27.5°	1084.1	1055.9	1003.6	974.3	956.5
30°	1047.5	1016.1	957.5	921.9	905.2
32.5°	1010.9	974.3	911.5	871.7	853.9
35°	969.0	931.4	866.5	821.5	802.6
37.5°	927.2	886.4	818.3	768.1	745.1
40°	887.4	841.4	767.1	712.6	688.6
42.5°	842.4	796.4	718.9	658.2	637.3
45°	796.4	749.3	668.7	609.0	583.9
47.5°	751.4	699.0	619.5	554.6	532.7
50°	701.1	651.9	567.2	502.3	478.2
52.5°	656.1	601.7	518.0	450.0	429.1
55°	604.9	553.6	464.6	403.9	383.0
57.5°	558.8	503.4	413.4	355.8	338.0
60°	510.7	453.1	366.3	309.8	292.0
62.5°	462.5	405.0	318.1	265.8	247.0
65°	413.4	355.8	274.2	222.9	211.4
67.5°	364.2	305.6	226.0	187.3	174.8
70°	316.0	259.5	186.3	149.6	138.1
72.5°	267.9	212.4	147.6	119.3	116.2
75°	218.7	168.5	110.9	100.5	98.4
77.5°	173.7	127.7	86.9	80.6	78.5
80°	130.8	87.9	65.9	62.8	60.7
82.5°	90.0	54.4	47.1	44.0	44.0
85°	55.5	32.4	29.3	27.2	27.2
87.5°	25.1	13.6	13.6	12.6	11.5
90°	0.5	5.0	10.9	12.8	13.7
92.5°	13.7	16.4	19.1	20.5	19.6
95°	26.9	30.1	33.7	35.5	35.5
97.5°	44.2	46.5	49.2	51.5	51.0
100°	62.0	64.7	67.0	68.3	69.2
102.5°	82.5	83.8	87.0	88.4	87.9
105°	102.5	103.4	107.5	107.5	108.4
107.5°	126.2	126.6	128.5	129.8	129.4
110°	148.0	149.0	149.9	151.7	150.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.8	171.3	171.3	173.6	173.6
115°	193.6	195.0	194.1	194.5	194.1
117.5°	216.8	217.3	216.4	216.4	215.0
120°	238.2	241.0	238.7	238.2	237.3
122.5°	260.6	262.4	261.5	260.1	258.7
125°	283.3	284.7	283.8	282.0	280.2
127.5°	304.3	307.0	306.1	303.4	301.6
130°	325.2	328.9	327.5	325.7	322.5
132.5°	346.2	349.8	348.9	346.7	344.4
135°	367.6	370.3	369.9	368.1	367.2
137.5°	387.2	389.5	390.8	388.6	387.2
140°	407.7	410.0	410.4	410.0	406.8
142.5°	426.4	428.7	429.6	429.1	426.8
145°	446.0	446.9	448.2	447.8	446.0
147.5°	462.8	464.6	466.0	466.0	463.3
150°	480.6	481.5	482.4	482.4	479.7
152.5°	495.2	496.5	497.0	497.9	495.6
155°	510.7	510.7	511.1	512.9	509.7
157.5°	523.9	523.4	523.9	525.7	523.0
160°	536.2	535.2	535.2	537.5	535.7
162.5°	547.1	545.7	546.2	548.5	545.3
165°	556.2	554.8	554.8	557.6	554.4
167.5°	563.9	562.1	562.6	565.3	562.6
170°	570.3	568.5	568.5	571.7	568.5
172.5°	575.3	573.5	573.5	576.2	573.1
175°	578.5	576.7	576.7	579.4	576.2
177.5°	580.3	578.5	578.5	581.3	578.1
180°	579.9	579.9	579.9	579.9	579.9

(END OF REPORT)