

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: P1031934

Luminaire Tested: S123DIW-B775D460UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031934
REPORT IS A COMBINATION OF REPORTS P992073 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D460UB30-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

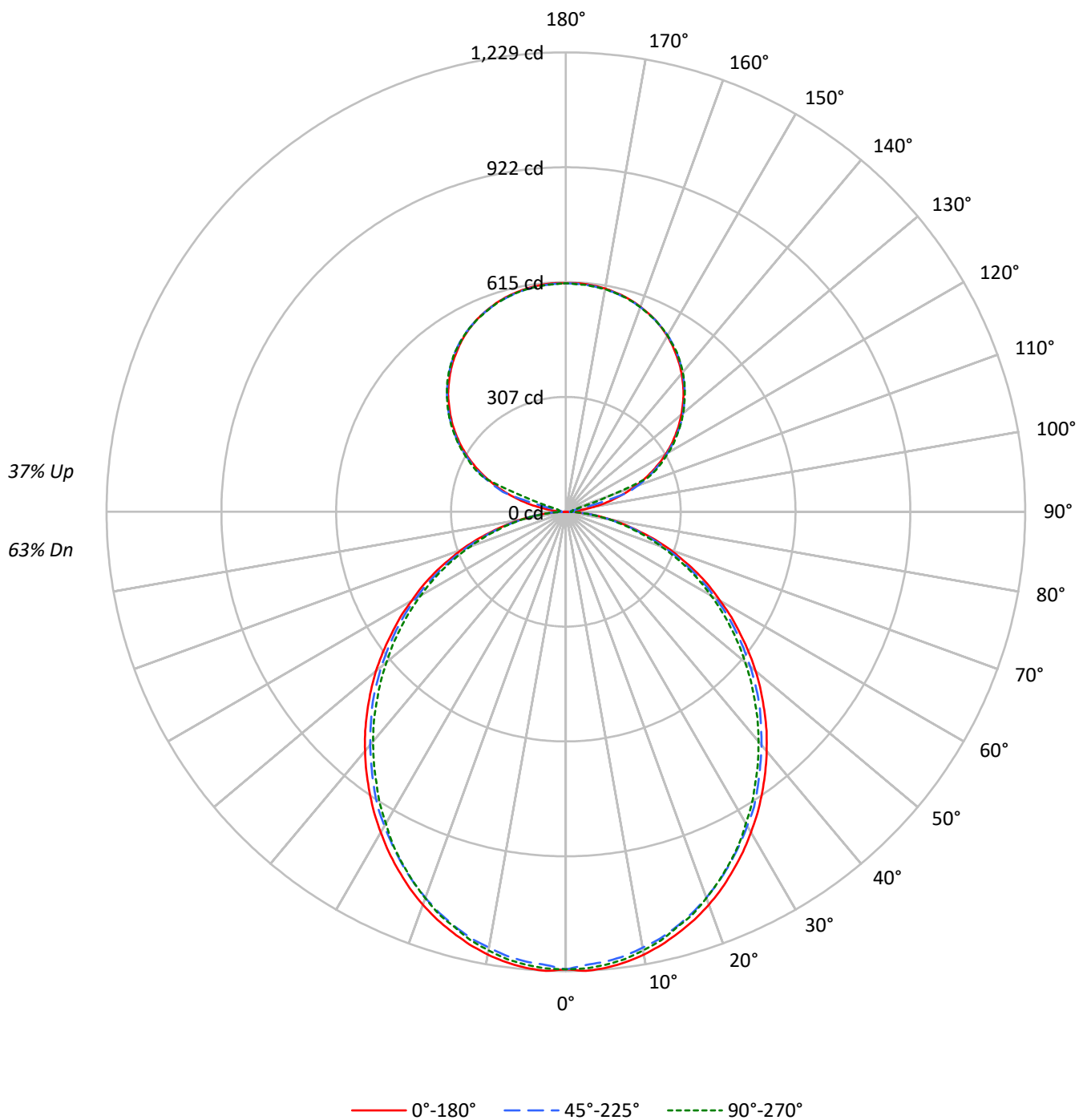
Lumens per Lamp: N/A
Luminaire Lumens: 5051.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57
2	92	84	78	72	86	79	73	69	70	65	62	61	58	55	53	50	48
3	84	74	66	60	78	70	63	57	61	56	52	54	50	46	47	44	41
4	77	65	57	51	71	62	54	49	55	49	44	48	43	40	42	38	35
5	70	58	50	44	66	55	48	42	49	43	38	43	38	34	38	34	31
6	65	52	44	38	61	50	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	36	31	27	31	27	24
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	39	32	27	49	37	30	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	25	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13177	13177	13177
5°	13209	12722	12703
10°	13092	12292	12165
15°	12910	11844	11580
20°	12701	11347	10999
25°	12431	10822	10378
30°	12136	10279	9725
35°	11827	9725	9076
40°	11503	9142	8438
45°	11146	8575	7771
50°	10783	7943	7102
55°	10319	7284	6424
60°	9838	6557	5702
65°	9389	5771	4949
70°	8740	4899	4072
75°	7809	3879	3161
80°	6743	2725	2236
85°	5254	1465	1119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11146 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	2.3
10°-20°	325.9	6.5
20°-30°	481.3	9.5
30°-40°	562.1	11.1
40°-50°	565.1	11.2
50°-60°	496.4	9.8
60°-70°	369.7	7.3
70°-80°	210.4	4.2
80°-90°	61.0	1.2
90°-100°	21.6	0.4
100°-110°	104.2	2.1
110°-120°	255.4	5.1
120°-130°	324.3	6.4
130°-140°	346.4	6.9
140°-150°	323.9	6.4
150°-160°	261.3	5.2
160°-170°	168.6	3.3
170°-180°	58.1	1.2
0°-30°	922.6	18.3
0°-40°	1484.6	29.4
0°-60°	2546.1	50.4
0°-90°	3187.2	63.1
90°-120°	381.2	7.5
90°-150°	1375.8	27.2
90°-180°	1864.0	36.9
0°-180°	5051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1225	1220	1208	1219	1217	116
15°	1166	1162	1148	1157	1150	329
25°	1059	1053	1039	1040	1037	488
35°	916	910	896	890	884	573
45°	750	746	733	720	715	579
55°	570	568	555	543	538	510
65°	388	383	373	364	361	383
75°	205	201	198	193	190	219
85°	55	53	53	50	50	59
90°	0	5	11	13	14	5
95°	28	9	14	17	17	33
105°	135	140	100	19	20	144
115°	254	257	261	265	267	251
125°	358	362	363	364	365	320
135°	446	448	450	452	450	343
145°	514	517	518	519	519	322
155°	566	566	566	568	566	261
165°	597	596	596	599	596	169
175°	611	609	610	613	609	58
180°	611	611	611	611	611	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1224.2	1224.2	1224.2	1224.2	1224.2
2.5°	1229.4	1225.2	1213.7	1224.2	1223.1
5°	1225.2	1220.0	1208.4	1218.9	1216.8
7.5°	1215.8	1210.5	1198.9	1208.4	1207.3
10°	1203.1	1197.9	1184.2	1193.7	1191.5
12.5°	1186.3	1182.1	1169.4	1175.8	1174.7
15°	1166.3	1162.1	1148.4	1156.8	1150.5
17.5°	1144.2	1138.9	1125.2	1131.6	1129.4
20°	1118.9	1112.6	1098.9	1103.1	1100.0
22.5°	1090.5	1084.2	1070.5	1073.7	1069.4
25°	1058.9	1052.6	1038.9	1040.0	1036.8
27.5°	1026.3	1020.0	1005.2	1006.3	1003.1
30°	990.5	985.2	970.5	970.5	963.1
32.5°	954.7	947.3	936.8	929.5	926.3
35°	915.8	909.5	895.8	889.5	884.2
37.5°	876.8	868.4	854.7	847.3	844.2
40°	835.8	829.5	814.7	806.3	802.1
42.5°	794.7	787.3	772.6	764.2	760.0
45°	750.5	746.3	732.6	720.0	714.7
47.5°	707.4	701.0	688.4	675.8	671.6
50°	663.1	657.9	644.2	632.6	626.3
52.5°	616.8	613.7	598.9	589.5	583.1
55°	569.5	568.4	554.7	543.1	537.9
57.5°	525.3	521.0	510.5	500.0	493.7
60°	476.8	475.8	463.1	453.7	448.4
62.5°	433.7	430.5	417.9	408.4	405.3
65°	388.4	383.1	372.6	364.2	361.0
67.5°	340.0	335.8	327.4	320.0	315.8
70°	296.8	290.5	284.2	276.8	271.6
72.5°	251.6	247.4	240.0	233.7	231.6
75°	205.3	201.0	197.9	192.6	189.5
77.5°	164.2	162.1	157.9	153.7	153.7
80°	124.2	121.0	118.9	117.9	117.9
82.5°	85.3	85.3	85.3	83.2	82.1
85°	54.7	52.6	52.6	50.5	50.5
87.5°	27.4	24.2	23.2	22.1	22.1
90°	0.5	5.0	10.9	12.7	13.6
92.5°	10.4	7.7	11.8	15.0	15.4
95°	27.7	9.1	14.1	17.3	17.3
97.5°	50.4	37.7	14.5	18.2	18.6
100°	76.8	85.8	15.0	18.6	19.1
102.5°	106.7	112.6	33.6	18.6	19.5
105°	135.4	140.3	99.5	19.1	20.0
107.5°	165.8	169.9	176.7	106.7	47.2
110°	196.2	199.8	204.8	189.9	124.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.3	228.5	233.5	237.5	236.6
115°	253.9	256.6	260.7	265.3	267.1
117.5°	282.1	285.2	287.5	291.1	291.6
120°	308.0	312.0	313.4	317.0	317.0
122.5°	334.3	337.5	339.3	341.6	342.0
125°	357.9	361.5	363.4	364.3	365.2
127.5°	381.5	385.2	387.4	388.8	387.9
130°	403.3	407.0	408.8	410.6	409.7
132.5°	424.2	427.9	429.2	431.0	429.7
135°	445.6	448.3	450.1	451.5	450.1
137.5°	463.7	467.4	468.3	470.6	469.6
140°	481.9	484.6	486.0	487.8	486.9
142.5°	498.7	501.4	502.8	504.2	502.8
145°	514.2	517.3	518.2	519.2	519.2
147.5°	529.1	531.4	532.3	533.2	531.0
150°	542.8	544.1	545.0	546.0	544.6
152.5°	555.0	555.5	555.9	557.8	555.5
155°	566.4	565.5	565.9	568.2	565.5
157.5°	575.5	575.5	575.0	577.7	574.1
160°	583.7	583.2	582.7	585.5	582.3
162.5°	591.4	590.0	589.6	592.7	590.0
165°	597.3	595.9	595.5	599.1	595.9
167.5°	602.3	600.5	600.5	604.1	600.5
170°	606.4	604.5	604.5	608.2	604.5
172.5°	609.1	606.8	607.3	610.9	606.8
175°	611.4	609.1	609.5	612.7	609.1
177.5°	612.3	610.0	610.5	614.1	609.5
180°	611.4	611.4	611.4	611.4	611.4

(END OF REPORT)