

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: P1031940

Luminaire Tested: S123DIW-B775D460UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031940
REPORT IS A COMBINATION OF REPORTS P992082 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D460UB35-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

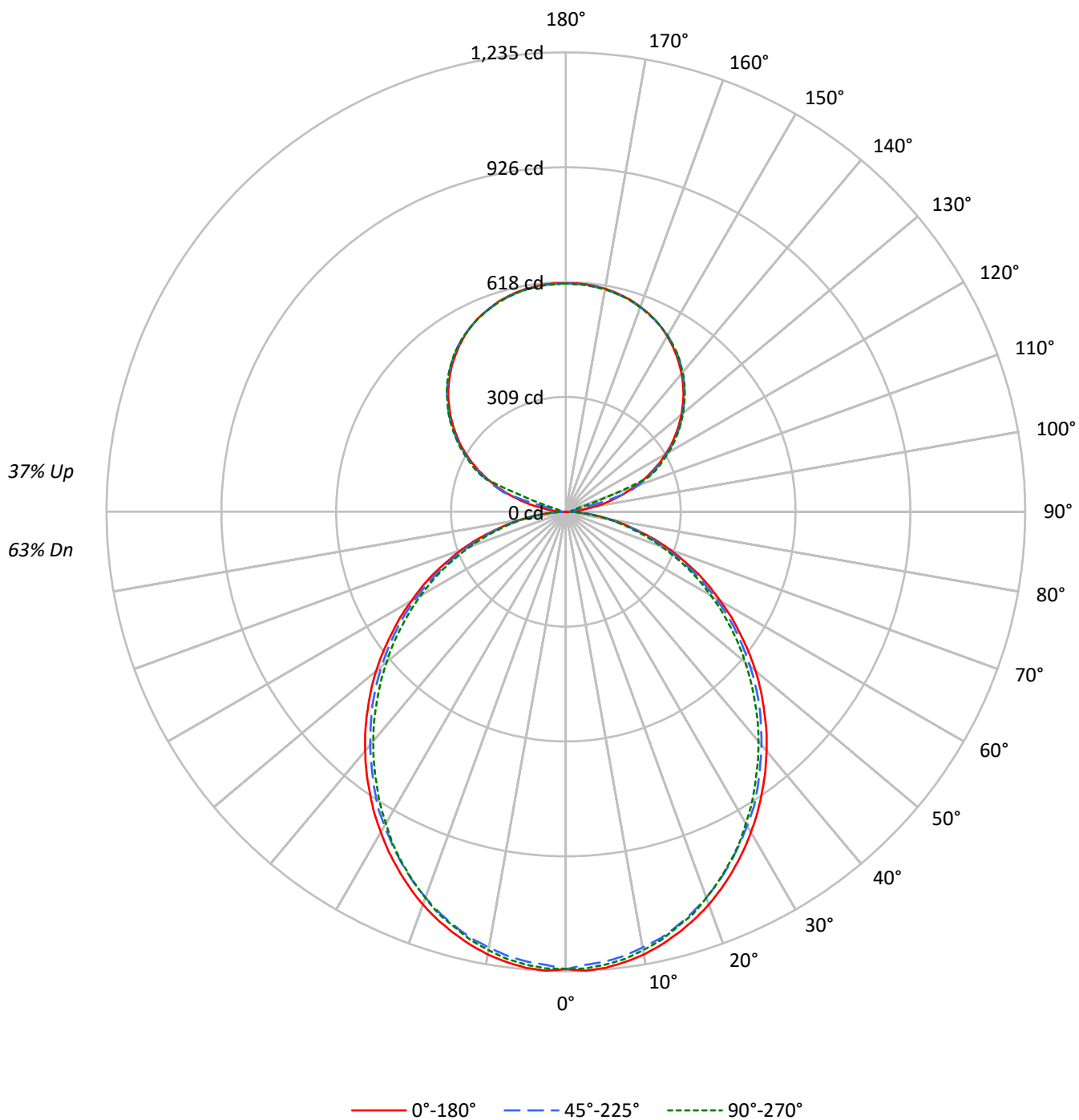
Lumens per Lamp: N/A
Luminaire Lumens: 5073.0 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1031940

CATALOG NUMBER: S123DIW-B775D460UB35-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1031940

CATALOG NUMBER: S123DIW-B775D460UB35-4F0-XX-W2A-F

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°	13235	13235	13235
5°	13268	12778	12759
10°	13150	12346	12219
15°	12967	11895	11631
20°	12757	11396	11047
25°	12486	10870	10424
30°	12190	10325	9768
35°	11879	9767	9117
40°	11552	9183	8475
45°	11195	8612	7806
50°	10832	7977	7134
55°	10364	7316	6452
60°	9882	6586	5728
65°	9430	5797	4971
70°	8779	4922	4090
75°	7844	3897	3175
80°	6775	2739	2245
85°	5283	1473	1124

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11195 cd/sqm

TEST NUMBER: P1031940

CATALOG NUMBER: S123DIW-B775D460UB35-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	2.3
10°-20°	327.3	6.5
20°-30°	483.4	9.5
30°-40°	564.6	11.1
40°-50°	567.5	11.2
50°-60°	498.6	9.8
60°-70°	371.3	7.3
70°-80°	211.3	4.2
80°-90°	61.3	1.2
90°-100°	21.7	0.4
100°-110°	104.7	2.1
110°-120°	256.5	5.1
120°-130°	325.6	6.4
130°-140°	347.9	6.9
140°-150°	325.3	6.4
150°-160°	262.4	5.2
160°-170°	169.3	3.3
170°-180°	58.4	1.2
0°-30°	926.6	18.3
0°-40°	1491.2	29.4
0°-60°	2557.3	50.4
0°-90°	3201.2	63.1
90°-120°	382.9	7.5
90°-150°	1381.7	27.2
90°-180°	1872.0	36.9
0°-180°	5073.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1230	1230	1230	1230	1230	
5°	1231	1225	1214	1224	1222	117
15°	1171	1167	1153	1162	1156	330
25°	1064	1057	1044	1044	1041	490
35°	920	913	900	893	888	575
45°	754	750	736	723	718	582
55°	572	571	557	546	540	512
65°	390	385	374	366	363	385
75°	206	202	199	194	190	220
85°	55	53	53	51	51	59
90°	0	5	11	13	14	5
95°	28	9	14	17	17	33
105°	136	141	100	19	20	144
115°	255	258	262	266	268	252
125°	359	363	365	366	367	321
135°	448	450	452	453	452	345
145°	516	520	520	521	521	323
155°	569	568	568	571	568	262
165°	600	598	598	602	598	169
175°	614	612	612	615	612	58
180°	614	614	614	614	614	

TEST NUMBER: P1031940

CATALOG NUMBER: S123DIW-B775D460UB35-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1229.6	1229.6	1229.6	1229.6	1229.6
2.5°	1234.8	1230.6	1219.0	1229.6	1228.5
5°	1230.6	1225.3	1213.7	1224.3	1222.2
7.5°	1221.1	1215.8	1204.2	1213.7	1212.6
10°	1208.4	1203.1	1189.4	1198.9	1196.8
12.5°	1191.5	1187.3	1174.6	1180.9	1179.9
15°	1171.4	1167.2	1153.4	1161.9	1155.6
17.5°	1149.2	1143.9	1130.2	1136.5	1134.4
20°	1123.8	1117.5	1103.7	1108.0	1104.8
22.5°	1095.3	1088.9	1075.2	1078.4	1074.1
25°	1063.6	1057.2	1043.5	1044.5	1041.4
27.5°	1030.8	1024.5	1009.7	1010.7	1007.5
30°	994.9	989.6	974.8	974.8	967.4
32.5°	958.9	951.5	940.9	933.5	930.4
35°	919.8	913.4	899.7	893.4	888.1
37.5°	880.7	872.2	858.5	851.1	847.9
40°	839.4	833.1	818.3	809.8	805.6
42.5°	798.2	790.8	776.0	767.5	763.3
45°	753.8	749.6	735.8	723.1	717.9
47.5°	710.5	704.1	691.4	678.7	674.5
50°	666.1	660.8	647.0	635.4	629.1
52.5°	619.5	616.4	601.6	592.0	585.7
55°	572.0	570.9	557.2	545.5	540.2
57.5°	527.6	523.3	512.8	502.2	495.8
60°	478.9	477.9	465.2	455.7	450.4
62.5°	435.6	432.4	419.7	410.2	407.0
65°	390.1	384.8	374.3	365.8	362.6
67.5°	341.5	337.3	328.8	321.4	317.2
70°	298.1	291.8	285.5	278.1	272.8
72.5°	252.7	248.4	241.0	234.7	232.6
75°	206.2	201.9	198.8	193.5	190.3
77.5°	164.9	162.8	158.6	154.4	154.4
80°	124.8	121.6	119.5	118.4	118.4
82.5°	85.6	85.6	85.6	83.5	82.5
85°	55.0	52.9	52.9	50.7	50.7
87.5°	27.5	24.3	23.3	22.2	22.2
90°	0.5	5.0	10.9	12.8	13.7
92.5°	10.5	7.8	11.9	15.1	15.5
95°	27.8	9.1	14.1	17.3	17.3
97.5°	50.6	37.9	14.6	18.2	18.7
100°	77.1	86.2	15.1	18.7	19.2
102.5°	107.2	113.1	33.8	18.7	19.6
105°	135.9	141.0	99.9	19.2	20.1
107.5°	166.5	170.6	177.4	107.2	47.4
110°	197.1	200.7	205.7	190.7	125.4



TEST NUMBER: P1031940

CATALOG NUMBER: S123DIW-B775D460UB35-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	226.3	229.4	234.5	238.6	237.7
115°	255.0	257.7	261.8	266.4	268.2
117.5°	283.3	286.5	288.7	292.4	292.8
120°	309.3	313.4	314.7	318.4	318.4
122.5°	335.7	338.9	340.7	343.0	343.5
125°	359.4	363.1	364.9	365.8	366.7
127.5°	383.2	386.8	389.1	390.5	389.6
130°	405.1	408.7	410.5	412.4	411.4
132.5°	426.0	429.7	431.1	432.9	431.5
135°	447.5	450.2	452.0	453.4	452.0
137.5°	465.7	469.4	470.3	472.6	471.7
140°	484.0	486.7	488.1	489.9	489.0
142.5°	500.9	503.6	505.0	506.3	505.0
145°	516.4	519.6	520.5	521.4	521.4
147.5°	531.4	533.7	534.6	535.5	533.2
150°	545.1	546.5	547.4	548.3	546.9
152.5°	557.4	557.9	558.3	560.2	557.9
155°	568.8	567.9	568.4	570.6	567.9
157.5°	577.9	577.9	577.5	580.2	576.6
160°	586.2	585.7	585.2	588.0	584.8
162.5°	593.9	592.5	592.1	595.3	592.5
165°	599.8	598.5	598.0	601.7	598.5
167.5°	604.9	603.0	603.0	606.7	603.0
170°	609.0	607.1	607.1	610.8	607.1
172.5°	611.7	609.4	609.9	613.5	609.4
175°	614.0	611.7	612.2	615.3	611.7
177.5°	614.9	612.6	613.1	616.7	612.2
180°	614.0	614.0	614.0	614.0	614.0

(END OF REPORT)