

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: P1031941

Luminaire Tested: S123DIW-B775D460UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031941
REPORT IS A COMBINATION OF REPORTS P992083 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D460UB35-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

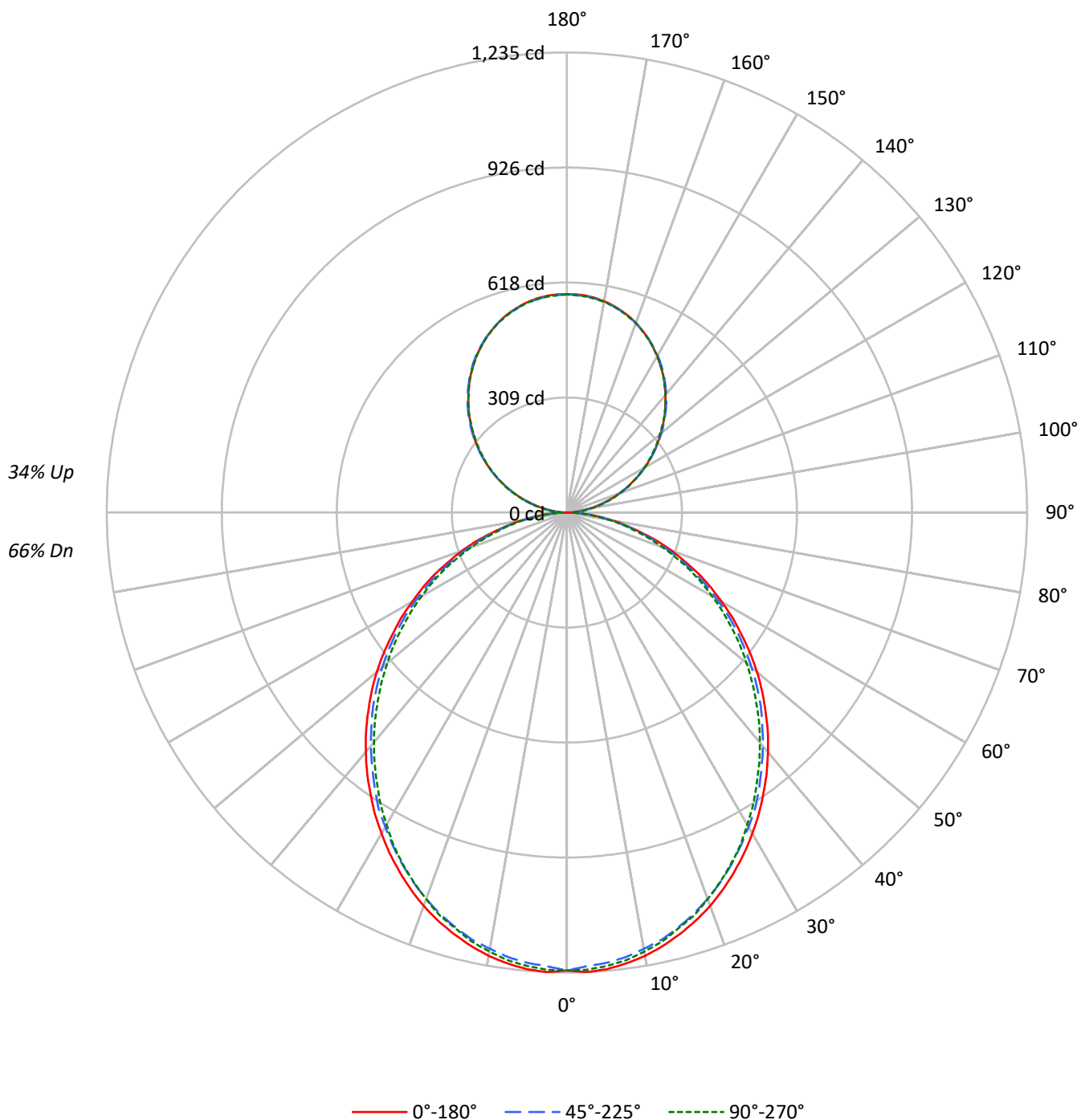
Lumens per Lamp: N/A
Luminaire Lumens: 4824.0 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	50
3	84	74	67	61	79	70	64	58	63	57	53	56	51	48	49	46	43
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37
5	71	59	50	44	66	56	48	42	50	44	39	44	39	36	39	35	32
6	65	53	44	38	61	50	43	37	45	39	34	40	35	31	36	32	28
7	60	48	40	34	57	45	38	33	41	35	30	37	31	28	33	28	25
8	56	43	36	30	53	41	34	29	37	31	27	34	28	25	30	26	23
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20
10	49	37	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	2.4
10°-20°	327.3	6.8
20°-30°	483.4	10.0
30°-40°	564.6	11.7
40°-50°	567.5	11.8
50°-60°	498.6	10.3
60°-70°	371.3	7.7
70°-80°	211.3	4.4
80°-90°	61.3	1.3
90°-100°	37.7	0.8
100°-110°	114.1	2.4
110°-120°	194.3	4.0
120°-130°	255.6	5.3
130°-140°	287.3	6.0
140°-150°	282.4	5.9
150°-160°	237.8	4.9
160°-170°	158.3	3.3
170°-180°	55.4	1.1
0°-30°	926.6	19.2
0°-40°	1491.2	30.9
0°-60°	2557.3	53.0
0°-90°	3201.2	66.4
90°-120°	346.1	7.2
90°-150°	1171.3	24.3
90°-180°	1623.0	33.6
0°-180°	4824.0	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	6
95°	27	30	34	36	36	30
105°	104	104	109	109	110	111
115°	196	197	196	196	196	193
125°	286	288	287	285	283	255
135°	371	374	374	372	371	286
145°	450	451	453	452	450	281
155°	516	516	516	518	515	237
165°	562	560	560	563	560	158
175°	584	582	582	585	582	56
180°	586	586	586	586	586	

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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	5.1	11.0	12.9	13.8
92.5°	13.8	16.6	19.3	20.7	19.8
95°	27.1	30.4	34.0	35.9	35.9
97.5°	44.6	46.9	49.7	52.0	51.5
100°	62.6	65.3	67.6	69.0	69.9
102.5°	83.3	84.7	87.9	89.3	88.8
105°	103.5	104.4	108.6	108.6	109.5
107.5°	127.4	127.9	129.7	131.1	130.7
110°	149.5	150.4	151.4	153.2	152.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	172.5	173.0	173.0	175.3	175.3
115°	195.5	196.9	196.0	196.4	196.0
117.5°	219.0	219.5	218.5	218.5	217.2
120°	240.6	243.4	241.1	240.6	239.7
122.5°	263.2	265.0	264.1	262.7	261.3
125°	286.2	287.5	286.6	284.8	282.9
127.5°	307.3	310.1	309.2	306.4	304.6
130°	328.5	332.2	330.8	328.9	325.7
132.5°	349.6	353.3	352.4	350.1	347.8
135°	371.3	374.0	373.6	371.7	370.8
137.5°	391.1	393.4	394.7	392.4	391.1
140°	411.8	414.1	414.5	414.1	410.8
142.5°	430.6	432.9	433.8	433.4	431.1
145°	450.4	451.3	452.7	452.2	450.4
147.5°	467.4	469.3	470.6	470.6	467.9
150°	485.4	486.3	487.2	487.2	484.4
152.5°	500.1	501.5	501.9	502.9	500.5
155°	515.7	515.7	516.2	518.0	514.8
157.5°	529.1	528.6	529.1	530.9	528.2
160°	541.5	540.6	540.6	542.9	541.0
162.5°	552.5	551.2	551.6	553.9	550.7
165°	561.7	560.4	560.4	563.1	559.9
167.5°	569.6	567.7	568.2	570.9	568.2
170°	576.0	574.2	574.2	577.4	574.2
172.5°	581.1	579.2	579.2	582.0	578.8
175°	584.3	582.4	582.4	585.2	582.0
177.5°	586.1	584.3	584.3	587.0	583.8
180°	585.7	585.7	585.7	585.7	585.7

(END OF REPORT)