

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: P1031929

Luminaire Tested: S123DIW-B775D460UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031929
REPORT IS A COMBINATION OF REPORTS P992044 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D460UB27-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

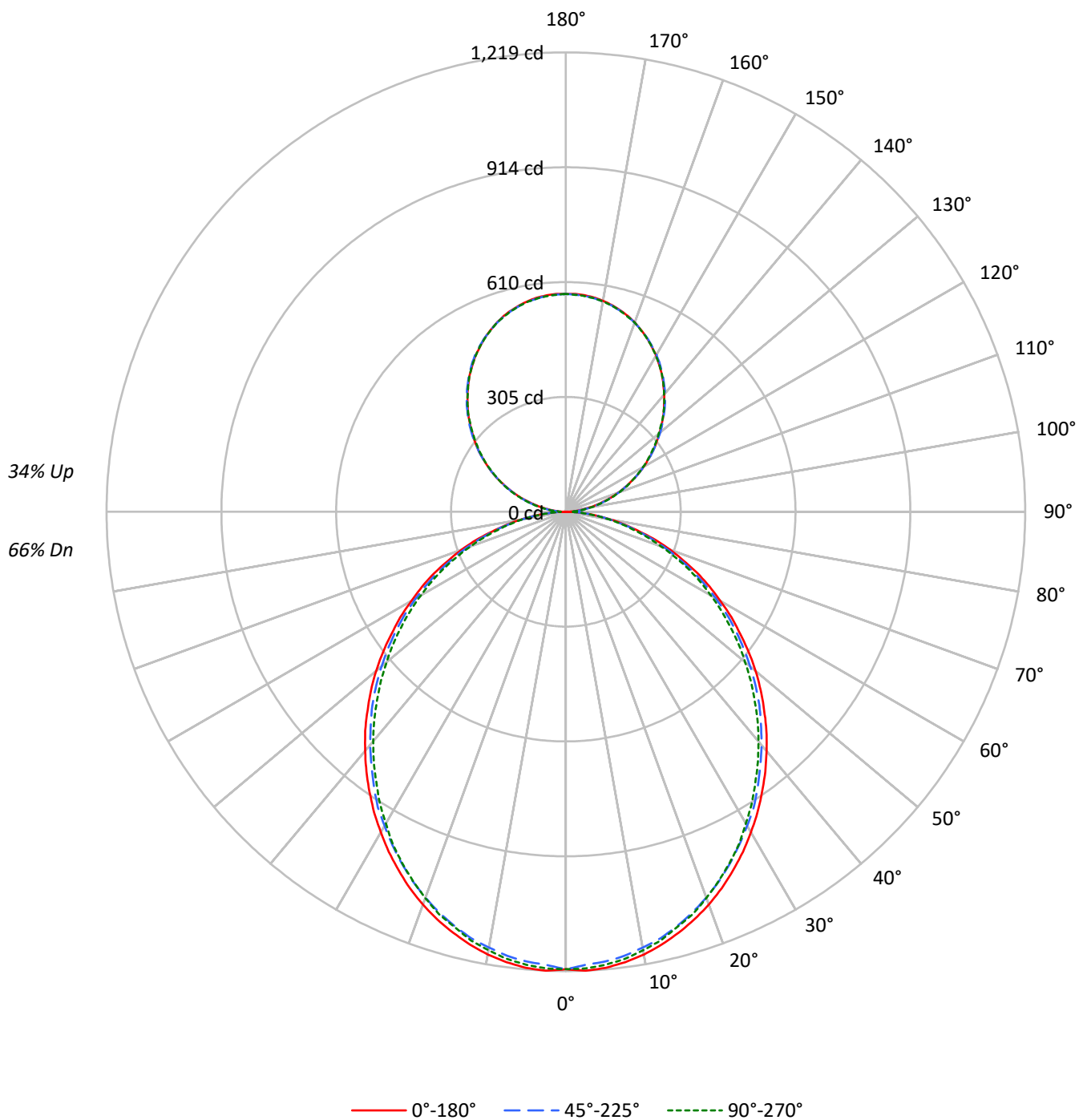
Lumens per Lamp: N/A
Luminaire Lumens: 4762.0 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	13065	13065	13065
5°	13097	12615	12595
10°	12981	12187	12063
15°	12801	11744	11481
20°	12593	11250	10906
25°	12326	10730	10290
30°	12033	10192	9643
35°	11726	9642	9000
40°	11405	9065	8367
45°	11051	8502	7706
50°	10692	7875	7042
55°	10230	7222	6369
60°	9756	6501	5654
65°	9309	5723	4908
70°	8667	4858	4038
75°	7741	3846	3135
80°	6688	2702	2217
85°	5216	1454	1110

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11051 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	2.4
10°-20°	323.1	6.8
20°-30°	477.2	10.0
30°-40°	557.3	11.7
40°-50°	560.3	11.8
50°-60°	492.2	10.3
60°-70°	366.6	7.7
70°-80°	208.6	4.4
80°-90°	60.5	1.3
90°-100°	37.2	0.8
100°-110°	112.6	2.4
110°-120°	191.7	4.0
120°-130°	252.3	5.3
130°-140°	283.5	6.0
140°-150°	278.8	5.9
150°-160°	234.7	4.9
160°-170°	156.2	3.3
170°-180°	54.7	1.1
0°-30°	914.7	19.2
0°-40°	1472.1	30.9
0°-60°	2524.5	53.0
0°-90°	3160.2	66.4
90°-120°	341.6	7.2
90°-150°	1156.2	24.3
90°-180°	1602.0	33.6
0°-180°	4762.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1214	1214	1214	1214	1214	
5°	1215	1210	1198	1209	1206	115
15°	1156	1152	1139	1147	1141	326
25°	1050	1044	1030	1031	1028	484
35°	908	902	888	882	877	568
45°	744	740	726	714	709	574
55°	565	564	550	538	533	506
65°	385	380	370	361	358	380
75°	204	199	196	191	188	217
85°	54	52	52	50	50	58
90°	0	5	11	13	14	6
95°	27	30	34	35	35	30
105°	102	103	107	107	108	109
115°	193	194	194	194	194	191
125°	282	284	283	281	279	252
135°	366	369	369	367	366	282
145°	445	446	447	446	445	278
155°	509	509	510	511	508	234
165°	554	553	553	556	553	156
175°	577	575	575	578	574	55
180°	578	578	578	578	578	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1213.8	1213.8	1213.8	1213.8	1213.8
2.5°	1219.0	1214.8	1203.4	1213.8	1212.8
5°	1214.8	1209.6	1198.2	1208.6	1206.5
7.5°	1205.5	1200.2	1188.8	1198.2	1197.1
10°	1192.9	1187.7	1174.1	1183.5	1181.5
12.5°	1176.2	1172.1	1159.5	1165.8	1164.8
15°	1156.4	1152.2	1138.7	1147.0	1140.7
17.5°	1134.5	1129.3	1115.7	1122.0	1119.9
20°	1109.4	1103.2	1089.6	1093.8	1090.7
22.5°	1081.3	1075.0	1061.4	1064.6	1060.4
25°	1049.9	1043.7	1030.1	1031.2	1028.0
27.5°	1017.6	1011.3	996.7	997.8	994.6
30°	982.1	976.9	962.3	962.3	955.0
32.5°	946.6	939.3	928.9	921.6	918.4
35°	908.0	901.7	888.2	881.9	876.7
37.5°	869.4	861.0	847.5	840.2	837.0
40°	828.7	822.4	807.8	799.5	795.3
42.5°	788.0	780.7	766.1	757.7	753.5
45°	744.1	740.0	726.4	713.9	708.7
47.5°	701.4	695.1	682.6	670.0	665.9
50°	657.5	652.3	638.7	627.3	621.0
52.5°	611.6	608.5	593.9	584.5	578.2
55°	564.6	563.6	550.0	538.5	533.3
57.5°	520.8	516.6	506.2	495.8	489.5
60°	472.8	471.7	459.2	449.8	444.6
62.5°	430.0	426.9	414.3	404.9	401.8
65°	385.1	379.9	369.5	361.1	358.0
67.5°	337.1	332.9	324.6	317.3	313.1
70°	294.3	288.1	281.8	274.5	269.3
72.5°	249.4	245.3	238.0	231.7	229.6
75°	203.5	199.3	196.2	191.0	187.9
77.5°	162.8	160.7	156.6	152.4	152.4
80°	123.2	120.0	117.9	116.9	116.9
82.5°	84.5	84.5	84.5	82.5	81.4
85°	54.3	52.2	52.2	50.1	50.1
87.5°	27.1	24.0	23.0	21.9	21.9
90°	0.5	5.0	10.9	12.7	13.6
92.5°	13.6	16.3	19.1	20.4	19.5
95°	26.8	30.0	33.6	35.4	35.4
97.5°	44.0	46.3	49.0	51.3	50.9
100°	61.8	64.5	66.8	68.1	69.0
102.5°	82.2	83.6	86.7	88.1	87.6
105°	102.2	103.1	107.2	107.2	108.1
107.5°	125.8	126.2	128.1	129.4	129.0
110°	147.6	148.5	149.4	151.2	150.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	170.7	170.7	173.0	173.0
115°	193.0	194.4	193.5	193.9	193.5
117.5°	216.2	216.6	215.7	215.7	214.3
120°	237.5	240.2	238.0	237.5	236.6
122.5°	259.8	261.6	260.7	259.3	257.9
125°	282.5	283.8	282.9	281.1	279.3
127.5°	303.3	306.1	305.2	302.4	300.6
130°	324.2	327.9	326.5	324.7	321.5
132.5°	345.1	348.8	347.9	345.6	343.3
135°	366.5	369.2	368.7	366.9	366.0
137.5°	386.0	388.3	389.6	387.4	386.0
140°	406.4	408.7	409.2	408.7	405.5
142.5°	425.1	427.3	428.2	427.8	425.5
145°	444.6	445.5	446.8	446.4	444.6
147.5°	461.4	463.2	464.6	464.6	461.8
150°	479.1	480.0	480.9	480.9	478.2
152.5°	493.6	495.0	495.4	496.3	494.1
155°	509.1	509.1	509.5	511.3	508.2
157.5°	522.2	521.8	522.2	524.0	521.3
160°	534.5	533.6	533.6	535.9	534.0
162.5°	545.4	544.0	544.5	546.8	543.6
165°	554.5	553.1	553.1	555.8	552.7
167.5°	562.2	560.4	560.8	563.6	560.8
170°	568.6	566.7	566.7	569.9	566.7
172.5°	573.5	571.7	571.7	574.5	571.3
175°	576.7	574.9	574.9	577.6	574.5
177.5°	578.5	576.7	576.7	579.5	576.3
180°	578.1	578.1	578.1	578.1	578.1

(END OF REPORT)