

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: P1031946

Luminaire Tested: S123DIW-B775D460UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031946
REPORT IS A COMBINATION OF REPORTS P992091 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D460UB40-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

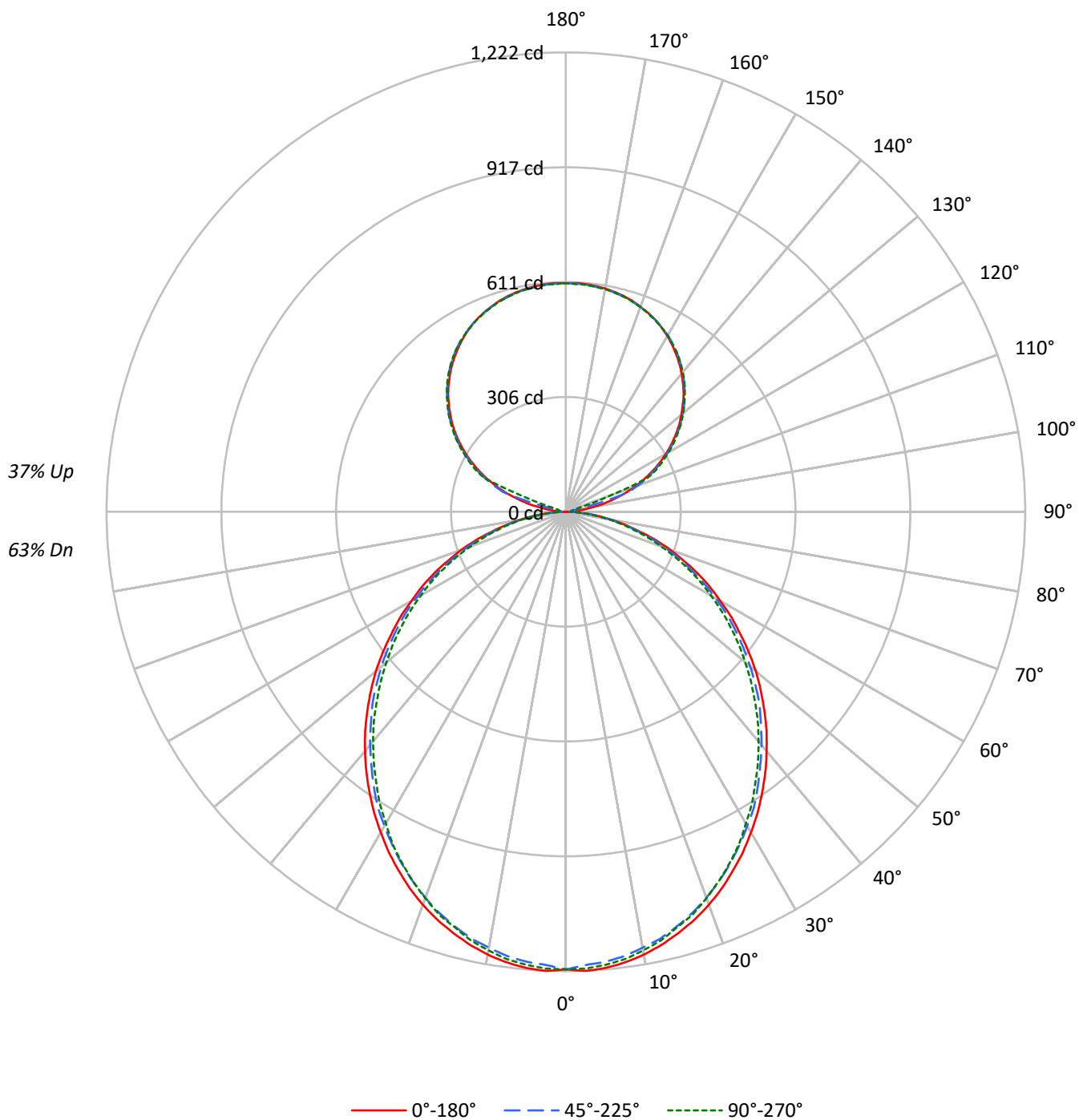
Lumens per Lamp: N/A
Luminaire Lumens: 5023.0 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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°	13103	13103	13103
5°	13135	12651	12631
10°	13018	12222	12097
15°	12837	11777	11514
20°	12630	11282	10937
25°	12361	10762	10320
30°	12067	10221	9670
35°	11760	9669	9025
40°	11437	9091	8391
45°	11083	8527	7728
50°	10723	7898	7063
55°	10259	7243	6387
60°	9783	6520	5671
65°	9336	5738	4922
70°	8693	4872	4048
75°	7764	3858	3143
80°	6705	2712	2223
85°	5225	1456	1113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11083 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	2.3
10°-20°	324.0	6.5
20°-30°	478.6	9.5
30°-40°	558.9	11.1
40°-50°	561.9	11.2
50°-60°	493.6	9.8
60°-70°	367.6	7.3
70°-80°	209.2	4.2
80°-90°	60.7	1.2
90°-100°	21.4	0.4
100°-110°	103.7	2.1
110°-120°	254.0	5.1
120°-130°	322.5	6.4
130°-140°	344.5	6.9
140°-150°	322.2	6.4
150°-160°	259.9	5.2
160°-170°	167.7	3.3
170°-180°	57.8	1.2
0°-30°	917.4	18.3
0°-40°	1476.3	29.4
0°-60°	2531.7	50.4
0°-90°	3169.2	63.1
90°-120°	379.2	7.5
90°-150°	1368.4	27.2
90°-180°	1854.0	36.9
0°-180°	5023.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1213	1202	1212	1210	116
15°	1160	1156	1142	1150	1144	327
25°	1053	1047	1033	1034	1031	485
35°	911	904	891	884	879	570
45°	746	742	728	716	711	576
55°	566	565	552	540	535	507
65°	386	381	370	362	359	381
75°	204	200	197	192	188	218
85°	54	52	52	50	50	58
90°	0	5	11	13	14	5
95°	28	9	14	17	17	33
105°	135	140	99	19	20	143
115°	252	255	259	264	266	249
125°	356	360	361	362	363	318
135°	443	446	448	449	448	341
145°	511	515	516	516	516	320
155°	563	562	563	565	562	260
165°	594	593	592	596	593	168
175°	608	606	606	609	606	58
180°	608	608	608	608	608	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.3	1217.3	1217.3	1217.3	1217.3
2.5°	1222.5	1218.3	1206.8	1217.3	1216.2
5°	1218.3	1213.1	1201.6	1212.0	1209.9
7.5°	1208.9	1203.7	1192.1	1201.6	1200.5
10°	1196.3	1191.1	1177.5	1186.9	1184.8
12.5°	1179.6	1175.4	1162.8	1169.1	1168.1
15°	1159.7	1155.5	1141.9	1150.3	1144.0
17.5°	1137.7	1132.5	1118.9	1125.2	1123.1
20°	1112.6	1106.3	1092.7	1096.9	1093.8
22.5°	1084.3	1078.1	1064.5	1067.6	1063.4
25°	1052.9	1046.7	1033.1	1034.1	1031.0
27.5°	1020.5	1014.2	999.6	1000.6	997.5
30°	984.9	979.7	965.0	965.0	957.7
32.5°	949.3	942.0	931.5	924.2	921.1
35°	910.6	904.3	890.7	884.4	879.2
37.5°	871.9	863.5	849.9	842.6	839.4
40°	831.0	824.8	810.1	801.7	797.6
42.5°	790.2	782.9	768.2	759.9	755.7
45°	746.3	742.1	728.5	715.9	710.7
47.5°	703.4	697.1	684.5	672.0	667.8
50°	659.4	654.2	640.6	629.0	622.8
52.5°	613.3	610.2	595.5	586.1	579.8
55°	566.2	565.2	551.6	540.1	534.8
57.5°	522.3	518.1	507.6	497.2	490.9
60°	474.1	473.1	460.5	451.1	445.9
62.5°	431.2	428.1	415.5	406.1	403.0
65°	386.2	381.0	370.5	362.1	359.0
67.5°	338.1	333.9	325.5	318.2	314.0
70°	295.2	288.9	282.6	275.3	270.0
72.5°	250.2	246.0	238.6	232.4	230.3
75°	204.1	199.9	196.8	191.5	188.4
77.5°	163.3	161.2	157.0	152.8	152.8
80°	123.5	120.4	118.3	117.2	117.2
82.5°	84.8	84.8	84.8	82.7	81.6
85°	54.4	52.3	52.3	50.2	50.2
87.5°	27.2	24.1	23.0	22.0	22.0
90°	0.5	5.0	10.8	12.6	13.6
92.5°	10.4	7.7	11.7	14.9	15.4
95°	27.6	9.0	14.0	17.2	17.2
97.5°	50.1	37.5	14.5	18.1	18.5
100°	76.3	85.4	14.9	18.5	19.0
102.5°	106.2	112.0	33.4	18.5	19.4
105°	134.6	139.6	98.9	19.0	19.9
107.5°	164.9	169.0	175.7	106.2	47.0
110°	195.2	198.8	203.7	188.8	124.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	224.1	227.2	232.2	236.3	235.4
115°	252.5	255.2	259.3	263.8	265.6
117.5°	280.5	283.7	286.0	289.6	290.0
120°	306.3	310.4	311.7	315.3	315.3
122.5°	332.5	335.7	337.5	339.7	340.2
125°	356.0	359.6	361.4	362.3	363.2
127.5°	379.5	383.1	385.4	386.7	385.8
130°	401.2	404.8	406.6	408.4	407.5
132.5°	422.0	425.6	426.9	428.7	427.4
135°	443.2	445.9	447.7	449.1	447.7
137.5°	461.3	464.9	465.8	468.0	467.1
140°	479.3	482.0	483.4	485.2	484.3
142.5°	496.0	498.8	500.1	501.5	500.1
145°	511.4	514.6	515.5	516.4	516.4
147.5°	526.3	528.6	529.5	530.4	528.1
150°	539.9	541.2	542.1	543.0	541.7
152.5°	552.1	552.5	553.0	554.8	552.5
155°	563.4	562.5	562.9	565.2	562.5
157.5°	572.4	572.4	571.9	574.6	571.0
160°	580.5	580.1	579.6	582.3	579.2
162.5°	588.2	586.8	586.4	589.6	586.8
165°	594.1	592.7	592.3	595.9	592.7
167.5°	599.0	597.2	597.2	600.9	597.2
170°	603.1	601.3	601.3	604.9	601.3
172.5°	605.8	603.6	604.0	607.6	603.6
175°	608.1	605.8	606.3	609.4	605.8
177.5°	609.0	606.7	607.2	610.8	606.3
180°	608.1	608.1	608.1	608.1	608.1

(END OF REPORT)