

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: P1031938

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031938
REPORT IS A COMBINATION OF REPORTS P992079 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-D
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

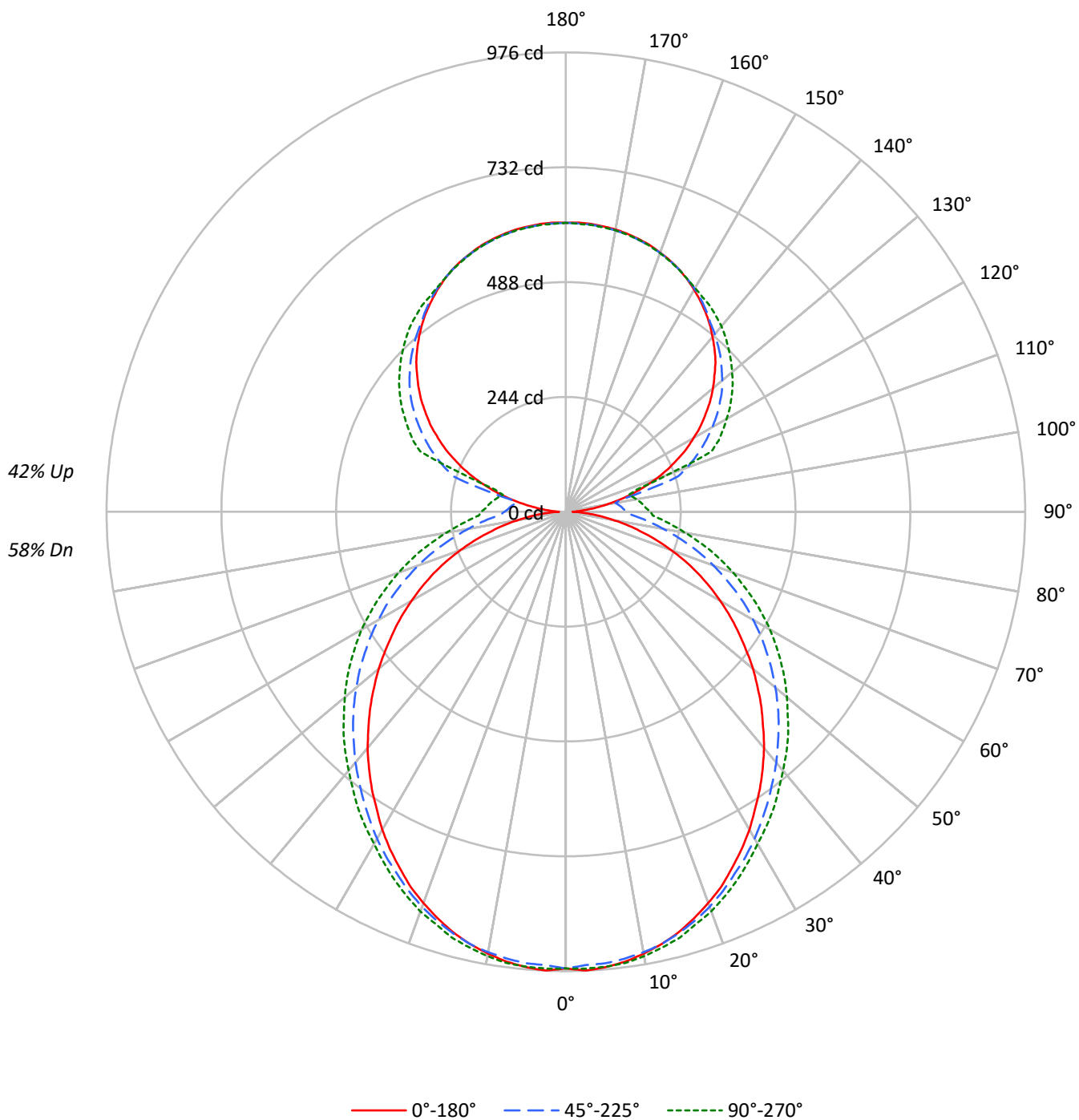
Lumens per Lamp: N/A
Luminaire Lumens: 5134.0 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 49.1
Input Voltage (V):
Input Current (A_{in}): 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: P1031938

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

Luminous Intensity Polar Plot



TEST NUMBER: P1031938

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

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64
1	98	93	89	85	91	87	83	80	75	72	70	64	62	60	54	53	51
2	89	81	74	69	83	76	70	65	65	61	57	56	52	49	47	45	42
3	81	71	63	57	75	66	59	53	57	52	47	49	45	41	41	38	35
4	74	62	54	48	68	58	51	45	51	45	40	43	39	35	37	33	30
5	68	56	47	41	63	52	44	38	45	39	34	39	34	30	33	29	26
6	62	50	41	35	58	47	39	33	41	34	30	35	30	26	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	27	23	20
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10444	10444	10444
5°	10473	10138	10130
10°	10375	9863	9788
15°	10238	9560	9426
20°	10043	9222	9036
25°	9803	8842	8633
30°	9558	8496	8228
35°	9281	8135	7899
40°	9019	7805	7550
45°	8728	7485	7263
50°	8440	7167	6951
55°	8121	6842	6666
60°	7808	6510	6371
65°	7487	6155	6028
70°	7003	5758	5674
75°	6394	5305	5309
80°	5679	4846	4891
85°	4976	4475	4593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8728 cd/sqm

TEST NUMBER: P1031938

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	1.8
10°-20°	262.4	5.1
20°-30°	392.4	7.6
30°-40°	468.5	9.1
40°-50°	490.2	9.5
50°-60°	460.0	9.0
60°-70°	384.2	7.5
70°-80°	274.7	5.4
80°-90°	164.7	3.2
90°-100°	124.4	2.4
100°-110°	180.2	3.5
110°-120°	306.9	6.0
120°-130°	354.4	6.9
130°-140°	360.8	7.0
140°-150°	328.0	6.4
150°-160°	262.4	5.1
160°-170°	169.3	3.3
170°-180°	58.4	1.1
0°-30°	746.8	14.5
0°-40°	1215.3	23.7
0°-60°	2165.5	42.2
0°-90°	2989.2	58.2
90°-120°	611.5	11.9
90°-150°	1654.7	32.2
90°-180°	2145.0	41.8
0°-180°	5134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	971	969	963	971	970	92
15°	925	928	927	938	936	261
25°	835	846	849	862	862	385
35°	719	736	749	765	770	449
45°	588	613	640	660	668	453
55°	448	483	521	550	558	401
65°	310	351	397	429	440	306
75°	168	218	271	306	318	180
85°	52	105	161	197	207	53
90°	14	70	130	168	180	11
95°	39	62	119	155	165	42
105°	144	175	179	128	138	153
115°	260	276	318	348	358	257
125°	363	366	399	422	430	324
135°	450	451	465	485	489	346
145°	518	520	520	530	534	324
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: P1031938

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.3	970.3	970.3	970.3	970.3
2.5°	975.6	972.4	964.0	972.4	971.4
5°	971.4	969.3	962.9	971.4	970.3
7.5°	964.0	964.0	957.6	968.2	967.1
10°	953.4	955.5	950.2	960.8	958.7
12.5°	940.7	943.9	940.7	950.2	948.1
15°	924.9	928.0	927.0	937.5	936.5
17.5°	905.8	912.2	911.1	920.6	918.5
20°	884.7	891.0	893.1	902.7	903.7
22.5°	862.5	868.8	872.0	884.7	883.6
25°	835.0	845.6	848.8	862.5	862.5
27.5°	808.6	820.2	826.6	838.2	839.2
30°	780.1	793.8	802.2	814.9	814.9
32.5°	748.3	764.2	775.8	789.6	792.7
35°	718.7	735.7	749.4	765.3	769.5
37.5°	687.0	706.1	721.9	739.9	743.1
40°	655.3	674.4	695.5	713.5	717.7
42.5°	620.4	644.8	667.0	687.0	693.4
45°	587.7	613.0	639.5	659.6	668.0
47.5°	552.8	581.3	610.9	633.1	639.5
50°	519.0	548.6	581.3	605.7	613.0
52.5°	483.0	514.8	551.7	577.1	586.6
55°	448.2	483.0	521.1	549.6	558.1
57.5°	414.3	450.3	491.5	520.0	529.5
60°	378.4	416.5	459.8	489.4	501.0
62.5°	344.6	383.7	430.2	459.8	470.4
65°	309.7	350.9	397.4	429.1	439.7
67.5°	274.8	318.2	364.7	399.5	408.0
70°	237.8	283.3	334.0	367.8	378.4
72.5°	204.0	249.4	302.3	337.2	347.7
75°	168.1	217.7	270.6	305.5	318.2
77.5°	137.4	187.1	239.9	276.9	286.4
80°	104.6	156.4	211.4	247.3	257.9
82.5°	76.1	129.0	185.0	220.9	231.5
85°	51.8	104.6	160.7	196.6	207.2
87.5°	31.7	84.6	138.5	174.4	185.0
90°	14.2	70.5	130.3	168.2	179.6
92.5°	23.2	65.9	122.9	161.0	170.9
95°	39.4	61.9	118.7	154.7	165.3
97.5°	61.2	86.5	112.9	148.2	159.3
100°	86.6	129.5	107.1	141.3	152.4
102.5°	115.7	151.2	119.4	133.9	145.4
105°	144.4	174.8	179.2	128.1	138.5
107.5°	173.9	200.2	250.3	208.7	158.4
110°	203.4	226.1	273.3	285.8	229.0



TEST NUMBER: P1031938

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	232.6	250.5	295.8	326.3	334.9
115°	260.3	275.7	317.8	347.8	358.0
117.5°	288.6	300.2	338.4	367.4	376.3
120°	313.5	322.9	359.1	387.1	394.5
122.5°	339.9	345.2	379.8	405.4	413.3
125°	362.6	366.3	398.7	421.8	430.1
127.5°	386.4	388.9	417.6	440.2	446.7
130°	408.3	410.8	433.8	455.7	461.1
132.5°	428.1	431.8	449.1	469.9	475.9
135°	449.6	451.3	464.7	485.1	489.0
137.5°	467.8	470.5	478.8	498.0	502.4
140°	485.1	487.8	492.3	510.0	514.4
142.5°	502.0	503.6	505.0	520.0	524.0
145°	517.5	519.6	520.5	529.9	534.1
147.5°	531.4	533.7	534.6	538.7	540.6
150°	545.1	546.5	547.4	548.3	549.0
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)