

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: P1031689

Luminaire Tested: S123DIW-B340D755UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031689
REPORT IS A COMBINATION OF REPORTS P991498 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D755UB40-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

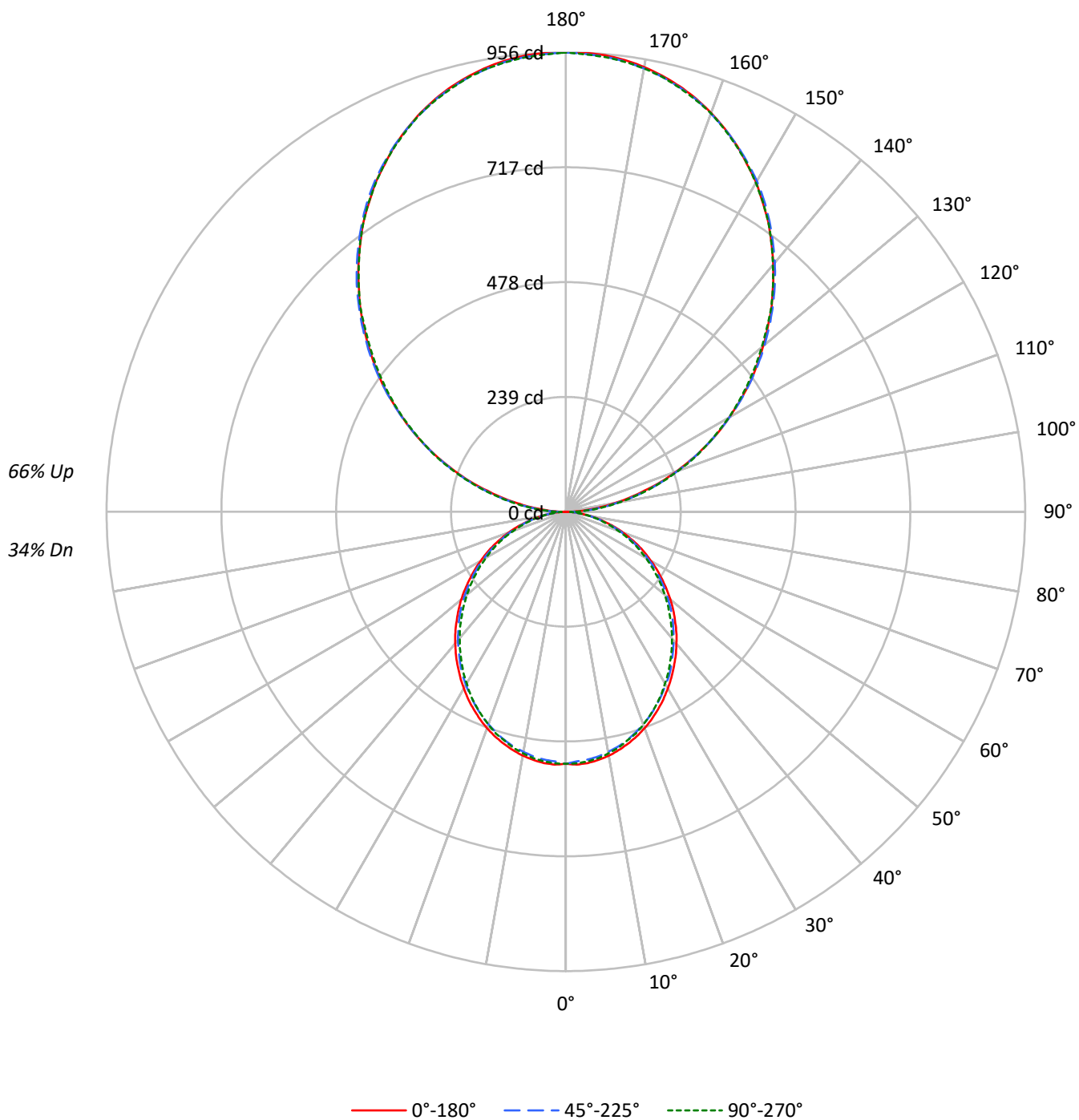
Lumens per Lamp: N/A
Luminaire Lumens: 4015.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 36.2
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: P1031689

CATALOG NUMBER: S123DIW-B340D755UB40-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1031689

CATALOG NUMBER: S123DIW-B340D755UB40-4F0-XX-W2A-F1

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	37	36	35
2	86	78	72	67	77	71	66	62	57	53	50	44	42	40	32	31	29
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	27	25
4	71	61	53	47	64	55	49	43	45	40	36	35	31	29	25	23	21
5	65	54	46	40	59	49	42	37	40	35	31	31	27	25	23	21	19
6	60	48	41	35	54	44	37	32	36	31	27	28	24	22	21	18	16
7	56	44	36	30	50	40	33	28	32	27	24	25	22	19	19	16	15
8	51	39	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5646	5646	5646
5°	5659	5450	5442
10°	5610	5266	5212
15°	5531	5074	4961
20°	5442	4861	4713
25°	5326	4637	4446
30°	5200	4404	4166
35°	5066	4167	3888
40°	4928	3917	3615
45°	4775	3674	3329
50°	4620	3403	3043
55°	4421	3121	2752
60°	4216	2809	2443
65°	4022	2472	2121
70°	3746	2100	1745
75°	3344	1662	1355
80°	2888	1169	958
85°	2257	627	479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4775 cd/sqm

TEST NUMBER: P1031689

CATALOG NUMBER: S123DIW-B340D755UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	1.2
10°-20°	139.6	3.5
20°-30°	206.2	5.1
30°-40°	240.8	6.0
40°-50°	242.1	6.0
50°-60°	212.7	5.3
60°-70°	158.4	3.9
70°-80°	90.1	2.2
80°-90°	27.6	0.7
90°-100°	61.5	1.5
100°-110°	186.2	4.6
110°-120°	317.0	7.9
120°-130°	417.0	10.4
130°-140°	468.7	11.7
140°-150°	460.8	11.5
150°-160°	388.0	9.7
160°-170°	258.3	6.4
170°-180°	90.4	2.3
0°-30°	395.3	9.8
0°-40°	636.1	15.8
0°-60°	1090.8	27.2
0°-90°	1367.0	34.0
90°-120°	564.7	14.1
90°-150°	1911.3	47.6
90°-180°	2648.0	66.0
0°-180°	4015.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	525	523	518	522	521	50
15°	500	498	492	496	493	141
25°	454	451	445	446	444	209
35°	392	390	384	381	379	245
45°	322	320	314	308	306	248
55°	244	244	238	233	230	219
65°	166	164	160	156	155	164
75°	88	86	85	82	81	94
85°	24	22	22	22	22	25
90°	1	8	18	21	22	5
95°	44	50	56	59	59	49
105°	169	170	177	177	179	181
115°	319	321	320	321	320	316
125°	467	469	468	465	462	416
135°	606	610	610	607	605	467
145°	735	736	739	738	735	459
155°	842	842	842	845	840	387
165°	917	914	914	919	914	259
175°	953	950	950	955	950	91
180°	956	956	956	956	956	

TEST NUMBER: P1031689

CATALOG NUMBER: S123DIW-B340D755UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	524.5	524.5	524.5	524.5	524.5
2.5°	526.7	524.9	520.0	524.5	524.0
5°	524.9	522.7	517.7	522.2	521.3
7.5°	520.9	518.6	513.7	517.7	517.3
10°	515.5	513.2	507.3	511.4	510.5
12.5°	508.2	506.4	501.0	503.7	503.3
15°	499.7	497.9	492.0	495.6	492.9
17.5°	490.2	488.0	482.1	484.8	483.9
20°	479.4	476.7	470.8	472.6	471.3
22.5°	467.2	464.5	458.6	460.0	458.2
25°	453.7	451.0	445.1	445.6	444.2
27.5°	439.7	437.0	430.7	431.1	429.8
30°	424.4	422.1	415.8	415.8	412.6
32.5°	409.0	405.9	401.4	398.2	396.9
35°	392.3	389.6	383.8	381.1	378.8
37.5°	375.7	372.1	366.2	363.0	361.7
40°	358.1	355.4	349.1	345.4	343.6
42.5°	340.5	337.3	331.0	327.4	325.6
45°	321.5	319.7	313.9	308.5	306.2
47.5°	303.1	300.3	294.9	289.5	287.7
50°	284.1	281.9	276.0	271.0	268.3
52.5°	264.3	262.9	256.6	252.5	249.8
55°	244.0	243.5	237.7	232.7	230.4
57.5°	225.0	223.2	218.7	214.2	211.5
60°	204.3	203.8	198.4	194.4	192.1
62.5°	185.8	184.4	179.0	175.0	173.6
65°	166.4	164.2	159.6	156.0	154.7
67.5°	145.7	143.9	140.3	137.1	135.3
70°	127.2	124.5	121.8	118.6	116.4
72.5°	107.8	106.0	102.8	100.1	99.2
75°	87.9	86.1	84.8	82.5	81.2
77.5°	70.4	69.5	67.6	65.8	65.8
80°	53.2	51.9	51.0	50.5	50.5
82.5°	36.5	36.5	36.5	35.6	35.2
85°	23.5	22.5	22.5	21.6	21.6
87.5°	11.7	10.4	9.9	9.5	9.5
90°	0.8	8.3	18.0	21.0	22.5
92.5°	22.5	27.0	31.5	33.8	32.3
95°	44.3	49.5	55.6	58.6	58.6
97.5°	72.8	76.6	81.1	84.8	84.1
100°	102.1	106.6	110.4	112.6	114.1
102.5°	135.9	138.1	143.4	145.6	144.9
105°	168.9	170.4	177.2	177.2	178.7
107.5°	207.9	208.7	211.7	214.0	213.2
110°	244.0	245.5	247.0	250.0	248.5

TEST NUMBER: P1031689

CATALOG NUMBER: S123DIW-B340D755UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.5	282.3	282.3	286.0	286.0
115°	319.1	321.3	319.8	320.6	319.8
117.5°	357.3	358.1	356.6	356.6	354.3
120°	392.6	397.1	393.4	392.6	391.1
122.5°	429.4	432.4	430.9	428.7	426.4
125°	466.9	469.2	467.7	464.7	461.7
127.5°	501.5	506.0	504.5	500.0	497.0
130°	536.0	542.0	539.8	536.8	531.5
132.5°	570.5	576.6	575.1	571.3	567.5
135°	605.8	610.3	609.6	606.6	605.1
137.5°	638.1	641.9	644.1	640.4	638.1
140°	671.9	675.6	676.4	675.6	670.4
142.5°	702.7	706.4	707.9	707.2	703.4
145°	735.0	736.5	738.7	738.0	735.0
147.5°	762.7	765.7	768.0	768.0	763.5
150°	792.0	793.5	795.0	795.0	790.5
152.5°	816.0	818.3	819.0	820.5	816.8
155°	841.6	841.6	842.3	845.3	840.1
157.5°	863.3	862.6	863.3	866.3	861.8
160°	883.6	882.1	882.1	885.8	882.8
162.5°	901.6	899.4	900.1	903.9	898.6
165°	916.6	914.4	914.4	918.9	913.6
167.5°	929.4	926.4	927.1	931.6	927.1
170°	939.9	936.9	936.9	942.2	936.9
172.5°	948.2	945.2	945.2	949.7	944.4
175°	953.4	950.4	950.4	954.9	949.7
177.5°	956.4	953.4	953.4	957.9	952.7
180°	955.7	955.7	955.7	955.7	955.7

(END OF REPORT)