

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: P1031681

Luminaire Tested: S123DIW-B340D755UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031681
REPORT IS A COMBINATION OF REPORTS P991486 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D755UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

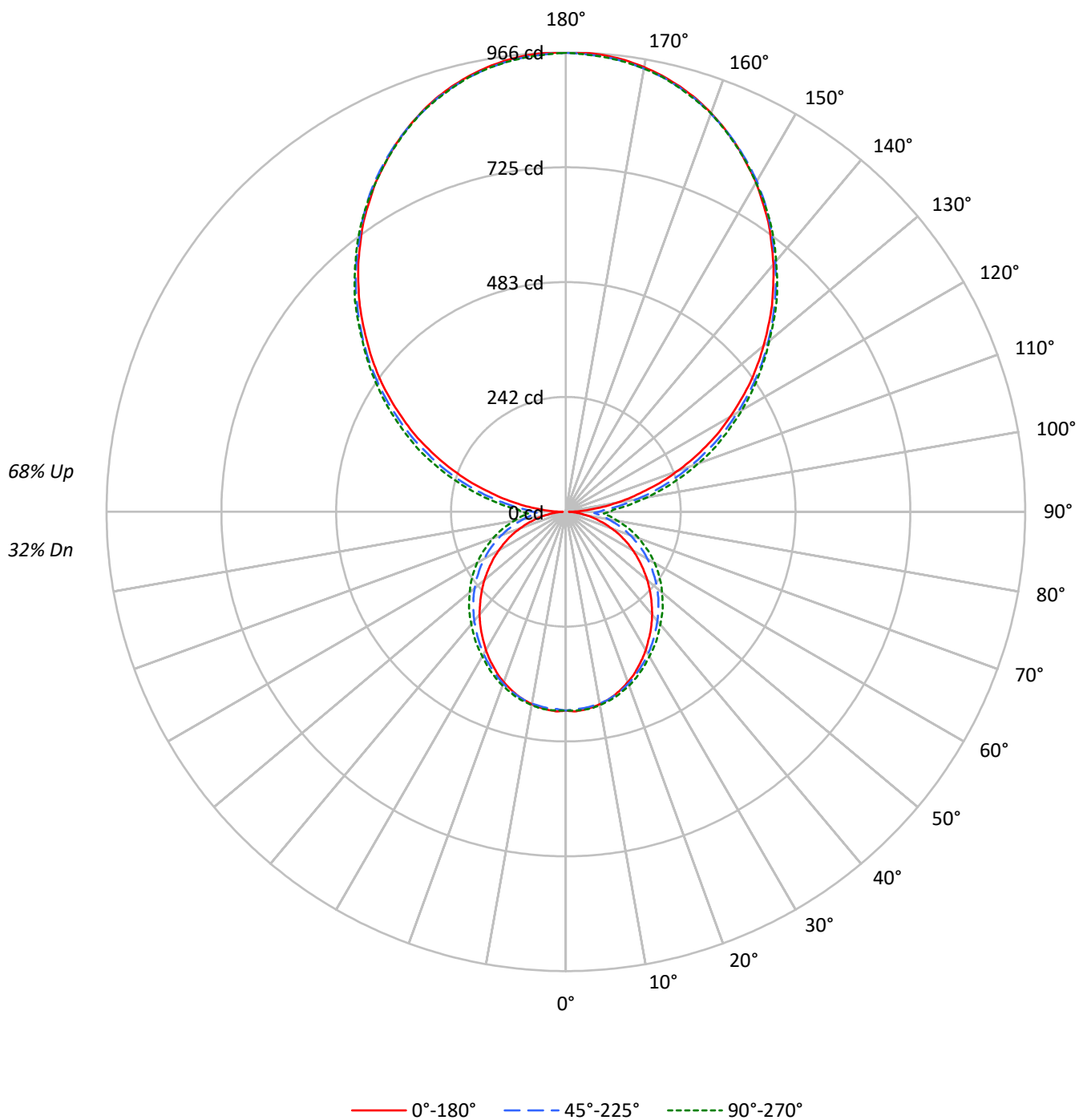
Lumens per Lamp: N/A
Luminaire Lumens: 4082.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	93	88	84	81	83	80	76	73	63	61	58	48	46	45	34	33	32
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	28	26
3	77	67	60	54	69	61	54	49	48	44	40	36	33	31	26	24	22
4	70	59	51	45	63	53	47	41	42	38	34	32	29	26	23	21	19
5	64	53	45	39	57	48	41	35	38	33	29	29	25	22	20	18	16
6	59	47	39	33	53	42	36	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	49	38	31	27	31	26	22	23	20	17	17	14	12
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	32	25	21	25	20	17	20	16	13	14	12	10
10	44	32	25	20	39	29	23	18	23	19	15	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4500	4500	4500
5°	4512	4368	4365
10°	4470	4250	4217
15°	4411	4119	4061
20°	4327	3973	3894
25°	4224	3809	3720
30°	4118	3660	3545
35°	4000	3505	3403
40°	3885	3363	3253
45°	3760	3225	3129
50°	3636	3089	2995
55°	3499	2948	2872
60°	3363	2805	2746
65°	3225	2652	2597
70°	3019	2481	2444
75°	2754	2286	2287
80°	2448	2088	2107
85°	2142	1927	1979

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3760 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.0
10°-20°	113.1	2.8
20°-30°	169.1	4.1
30°-40°	201.9	4.9
40°-50°	211.2	5.2
50°-60°	198.2	4.9
60°-70°	165.5	4.1
70°-80°	118.4	2.9
80°-90°	72.5	1.8
90°-100°	106.4	2.6
100°-110°	220.6	5.4
110°-120°	341.9	8.4
120°-130°	433.7	10.6
130°-140°	479.1	11.7
140°-150°	466.7	11.4
150°-160°	391.9	9.6
160°-170°	260.9	6.4
170°-180°	91.4	2.2
0°-30°	321.8	7.9
0°-40°	523.6	12.8
0°-60°	933.0	22.9
0°-90°	1289.4	31.6
90°-120°	669.0	16.4
90°-150°	2048.4	50.2
90°-180°	2793.0	68.4
0°-180°	4082.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	418	418	415	418	418	40
15°	398	400	399	404	404	112
25°	360	364	366	372	372	166
35°	310	317	323	330	332	194
45°	253	264	276	284	288	195
55°	193	208	224	237	240	173
65°	133	151	171	185	189	132
75°	72	94	117	132	137	77
85°	22	45	69	85	89	23
90°	7	36	70	88	94	8
95°	50	73	101	118	123	53
105°	174	187	213	226	232	186
115°	325	332	347	359	362	321
125°	473	475	487	494	494	422
135°	613	617	621	626	627	472
145°	743	744	746	749	748	464
155°	850	850	851	854	849	391
165°	926	924	924	928	923	261
175°	963	960	960	965	959	92
180°	965	965	965	965	965	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	418.1	418.1	418.1	418.1	418.1
2.5°	420.3	419.0	415.3	419.0	418.5
5°	418.5	417.6	414.9	418.5	418.1
7.5°	415.3	415.3	412.6	417.1	416.7
10°	410.8	411.7	409.4	414.0	413.0
12.5°	405.3	406.7	405.3	409.4	408.5
15°	398.5	399.8	399.4	403.9	403.5
17.5°	390.3	393.0	392.6	396.7	395.7
20°	381.2	383.9	384.8	388.9	389.4
22.5°	371.6	374.3	375.7	381.2	380.7
25°	359.8	364.3	365.7	371.6	371.6
27.5°	348.4	353.4	356.1	361.1	361.6
30°	336.1	342.0	345.6	351.1	351.1
32.5°	322.4	329.3	334.3	340.2	341.6
35°	309.7	317.0	322.9	329.7	331.5
37.5°	296.0	304.2	311.0	318.8	320.1
40°	282.3	290.5	299.7	307.4	309.2
42.5°	267.3	277.8	287.4	296.0	298.7
45°	253.2	264.1	275.5	284.2	287.8
47.5°	238.2	250.5	263.2	272.8	275.5
50°	223.6	236.4	250.5	260.9	264.1
52.5°	208.1	221.8	237.7	248.6	252.7
55°	193.1	208.1	224.5	236.8	240.5
57.5°	178.5	194.0	211.8	224.1	228.2
60°	163.0	179.4	198.1	210.9	215.9
62.5°	148.5	165.3	185.3	198.1	202.7
65°	133.4	151.2	171.2	184.9	189.4
67.5°	118.4	137.1	157.1	172.1	175.8
70°	102.5	122.0	143.9	158.5	163.0
72.5°	87.9	107.5	130.2	145.3	149.8
75°	72.4	93.8	116.6	131.6	137.1
77.5°	59.2	80.6	103.4	119.3	123.4
80°	45.1	67.4	91.1	106.6	111.1
82.5°	32.8	55.6	79.7	95.2	99.7
85°	22.3	45.1	69.2	84.7	89.3
87.5°	13.7	36.4	59.7	75.1	79.7
90°	6.7	36.5	69.7	88.1	94.3
92.5°	28.3	52.3	79.7	96.9	99.5
95°	49.7	72.9	101.2	118.4	123.0
97.5°	78.2	98.3	124.3	141.7	145.5
100°	107.2	126.4	151.1	166.6	172.7
102.5°	140.9	155.9	181.7	196.7	200.6
105°	174.2	186.7	213.2	225.9	231.5
107.5°	213.3	223.6	245.3	259.8	263.2
110°	249.2	258.9	278.6	293.5	295.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	287.1	294.2	311.5	326.7	330.8
115°	324.6	332.3	347.2	358.9	361.8
117.5°	363.3	367.6	381.6	392.5	394.0
120°	398.4	405.3	416.5	426.2	427.9
122.5°	435.6	439.5	452.1	459.9	460.9
125°	473.1	475.4	487.1	493.5	493.7
127.5°	508.0	512.0	521.9	526.5	526.6
130°	542.9	548.4	555.3	560.9	558.3
132.5°	577.3	583.3	588.6	593.0	592.4
135°	612.9	617.1	621.3	626.5	627.1
137.5°	645.5	648.9	654.3	657.8	657.8
140°	679.2	683.0	685.1	691.2	688.1
142.5°	710.3	713.6	715.1	720.3	718.8
145°	742.9	744.0	746.2	749.1	747.9
147.5°	770.5	773.5	775.8	777.2	774.5
150°	800.1	801.6	803.1	803.1	799.5
152.5°	824.3	826.6	827.4	828.9	825.1
155°	850.1	850.1	850.9	853.9	848.6
157.5°	872.1	871.4	872.1	875.2	870.6
160°	892.6	891.1	891.1	894.9	891.8
162.5°	910.8	908.5	909.3	913.1	907.8
165°	926.0	923.7	923.7	928.2	922.9
167.5°	938.9	935.8	936.6	941.1	936.6
170°	949.5	946.4	946.4	951.8	946.4
172.5°	957.8	954.8	954.8	959.3	954.0
175°	963.1	960.1	960.1	964.6	959.3
177.5°	966.2	963.1	963.1	967.7	962.4
180°	965.4	965.4	965.4	965.4	965.4

(END OF REPORT)