

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: P1031693

Luminaire Tested: S123DIW-B340D755UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031693
REPORT IS A COMBINATION OF REPORTS P991504 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D755UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

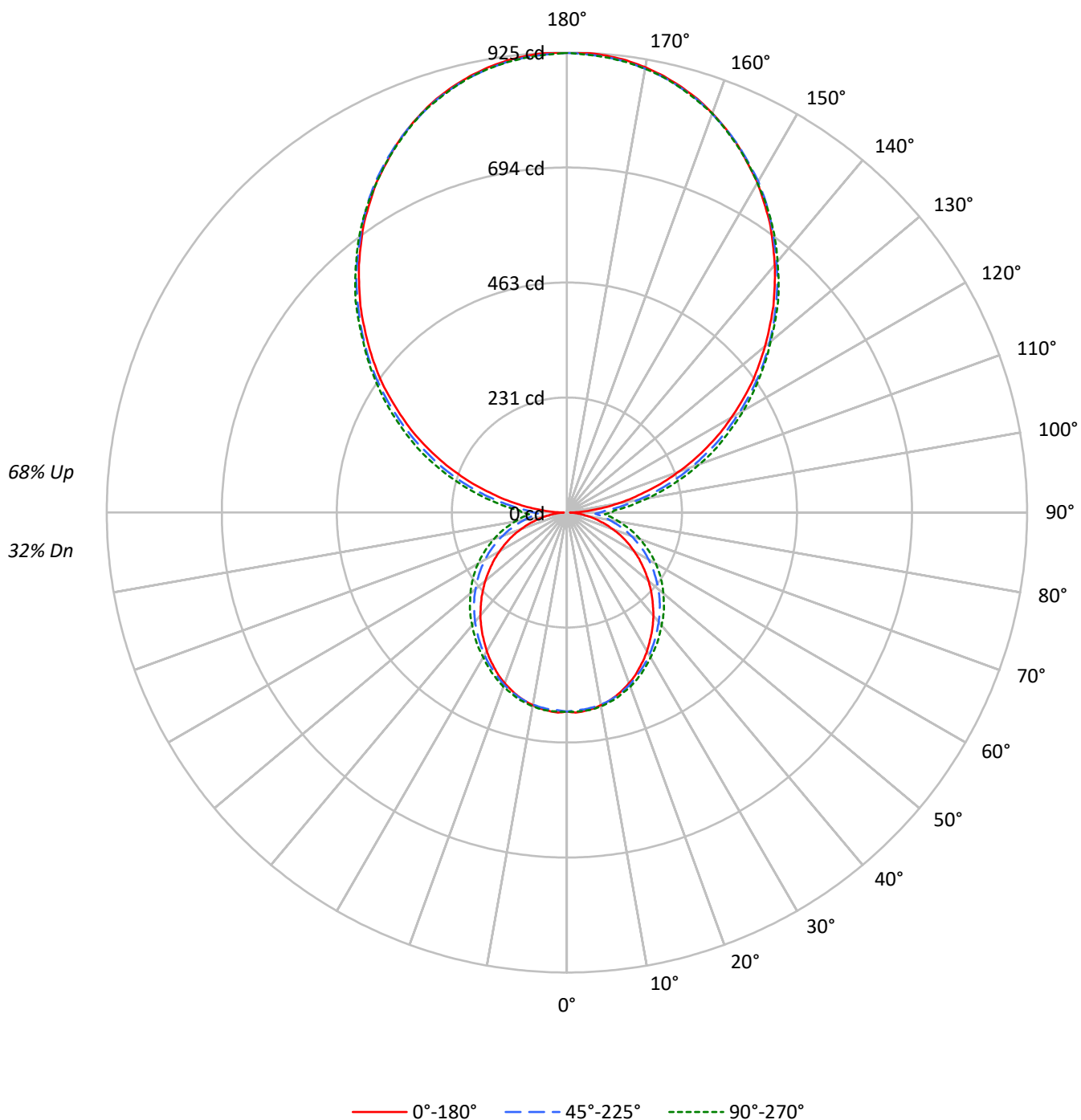
Lumens per Lamp: N/A
Luminaire Lumens: 3909.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 36.2
Input Voltage (V):
Input Current (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

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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					0
RW	70	50	30	10	70	50	30	10	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	39	39	39
1	93	88	84	81	83	80	76	73	63	61	58	48	46	45	34	33	32	32	32	32
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	28	26	26	26	26
3	77	67	60	54	69	61	54	49	48	44	40	36	33	31	26	24	22	22	22	22
4	70	59	51	45	63	53	47	41	42	38	34	32	29	26	23	21	19	19	19	19
5	64	53	45	39	57	48	41	35	38	33	29	29	25	22	20	18	16	16	16	16
6	59	47	39	33	53	42	36	30	34	29	25	26	22	19	18	16	14	14	14	14
7	54	42	34	29	49	38	31	27	31	26	22	23	20	17	17	14	13	13	13	13
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11	11	11	11
9	47	35	27	22	42	32	25	21	25	20	17	20	16	13	14	12	10	10	10	10
10	44	32	25	20	39	29	23	18	23	19	15	18	15	12	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4311	4311	4311
5°	4322	4184	4181
10°	4282	4071	4040
15°	4225	3946	3890
20°	4146	3807	3730
25°	4047	3649	3563
30°	3945	3507	3397
35°	3832	3358	3260
40°	3723	3222	3116
45°	3603	3089	2998
50°	3483	2959	2869
55°	3352	2824	2752
60°	3223	2687	2630
65°	3089	2540	2488
70°	2892	2377	2342
75°	2640	2190	2191
80°	2345	2001	2020
85°	2056	1846	1895

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3603 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	1.0
10°-20°	108.3	2.8
20°-30°	162.0	4.1
30°-40°	193.4	4.9
40°-50°	202.3	5.2
50°-60°	189.9	4.9
60°-70°	158.6	4.1
70°-80°	113.4	2.9
80°-90°	69.4	1.8
90°-100°	101.9	2.6
100°-110°	211.3	5.4
110°-120°	327.4	8.4
120°-130°	415.2	10.6
130°-140°	458.7	11.7
140°-150°	446.8	11.4
150°-160°	375.2	9.6
160°-170°	249.8	6.4
170°-180°	87.5	2.2
0°-30°	308.3	7.9
0°-40°	501.6	12.8
0°-60°	893.8	22.9
0°-90°	1235.3	31.6
90°-120°	640.5	16.4
90°-150°	1961.2	50.2
90°-180°	2674.0	68.4
0°-180°	3909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	401	400	397	401	400	38
15°	382	383	383	387	386	108
25°	345	349	350	356	356	159
35°	297	304	309	316	318	186
45°	243	253	264	272	276	187
55°	185	199	215	227	230	166
65°	128	145	164	177	182	126
75°	69	90	112	126	131	74
85°	21	43	66	81	86	22
90°	6	35	67	84	90	7
95°	48	70	97	113	118	51
105°	167	179	204	216	222	178
115°	311	318	332	344	346	308
125°	453	455	466	472	473	404
135°	587	591	595	600	600	452
145°	711	712	714	717	716	444
155°	814	814	815	818	812	375
165°	886	884	884	889	884	250
175°	922	919	919	924	918	88
180°	924	924	924	924	924	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	400.5	400.5	400.5	400.5	400.5
2.5°	402.7	401.4	397.9	401.4	400.9
5°	400.9	400.1	397.4	400.9	400.5
7.5°	397.9	397.9	395.3	399.6	399.2
10°	393.5	394.4	392.2	396.6	395.7
12.5°	388.3	389.6	388.3	392.2	391.3
15°	381.7	383.1	382.6	387.0	386.5
17.5°	373.9	376.5	376.1	380.0	379.1
20°	365.2	367.8	368.7	372.6	373.0
22.5°	356.0	358.6	359.9	365.2	364.7
25°	344.7	349.0	350.3	356.0	356.0
27.5°	333.8	338.6	341.2	346.0	346.4
30°	322.0	327.6	331.1	336.4	336.4
32.5°	308.9	315.4	320.2	325.9	327.2
35°	296.7	303.6	309.3	315.9	317.6
37.5°	283.6	291.4	298.0	305.4	306.7
40°	270.5	278.3	287.1	294.5	296.2
42.5°	256.1	266.1	275.3	283.6	286.2
45°	242.6	253.0	263.9	272.2	275.7
47.5°	228.2	240.0	252.2	261.3	263.9
50°	214.2	226.4	240.0	250.0	253.0
52.5°	199.4	212.5	227.7	238.2	242.1
55°	185.0	199.4	215.1	226.9	230.4
57.5°	171.0	185.9	202.9	214.6	218.6
60°	156.2	171.9	189.8	202.0	206.8
62.5°	142.2	158.4	177.6	189.8	194.1
65°	127.8	144.8	164.0	177.1	181.5
67.5°	113.4	131.3	150.5	164.9	168.4
70°	98.2	116.9	137.9	151.8	156.2
72.5°	84.2	103.0	124.8	139.2	143.5
75°	69.4	89.9	111.7	126.1	131.3
77.5°	56.7	77.2	99.0	114.3	118.2
80°	43.2	64.6	87.3	102.1	106.5
82.5°	31.4	53.2	76.3	91.2	95.5
85°	21.4	43.2	66.3	81.1	85.5
87.5°	13.1	34.9	57.2	72.0	76.3
90°	6.4	35.0	66.7	84.4	90.3
92.5°	27.0	50.1	76.3	92.9	95.3
95°	47.6	69.7	96.9	113.3	117.7
97.5°	74.8	94.2	119.0	135.7	139.3
100°	102.6	121.0	144.7	159.5	165.4
102.5°	134.9	149.3	174.0	188.5	192.0
105°	166.9	178.8	204.1	216.3	221.7
107.5°	204.2	214.0	234.9	248.8	252.0
110°	238.6	247.9	266.8	281.1	283.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	274.9	281.7	298.3	312.8	316.7
115°	310.8	318.2	332.4	343.6	346.4
117.5°	347.8	352.0	365.4	375.9	377.2
120°	381.4	388.0	398.8	408.1	409.7
122.5°	417.0	420.8	432.9	440.3	441.2
125°	452.9	455.1	466.3	472.5	472.7
127.5°	486.3	490.3	499.7	504.1	504.3
130°	519.7	525.1	531.6	537.0	534.6
132.5°	552.7	558.5	563.6	567.8	567.2
135°	586.8	590.7	594.8	599.8	600.5
137.5°	618.1	621.2	626.5	629.8	629.9
140°	650.2	653.9	655.9	661.8	658.9
142.5°	680.0	683.2	684.7	689.7	688.2
145°	711.2	712.3	714.5	717.2	716.0
147.5°	737.7	740.6	742.8	744.1	741.5
150°	766.0	767.5	768.9	768.9	765.5
152.5°	789.2	791.4	792.1	793.6	790.0
155°	813.9	813.9	814.7	817.6	812.5
157.5°	835.0	834.3	835.0	837.9	833.5
160°	854.6	853.1	853.1	856.8	853.9
162.5°	872.0	869.8	870.6	874.2	869.1
165°	886.5	884.4	884.4	888.7	883.6
167.5°	898.9	896.0	896.7	901.1	896.7
170°	909.0	906.1	906.1	911.2	906.1
172.5°	917.0	914.1	914.1	918.5	913.4
175°	922.1	919.2	919.2	923.6	918.5
177.5°	925.0	922.1	922.1	926.5	921.4
180°	924.3	924.3	924.3	924.3	924.3

(END OF REPORT)