

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: P1031695

Luminaire Tested: S123DIW-B340D755UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031695
REPORT IS A COMBINATION OF REPORTS P991507 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-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

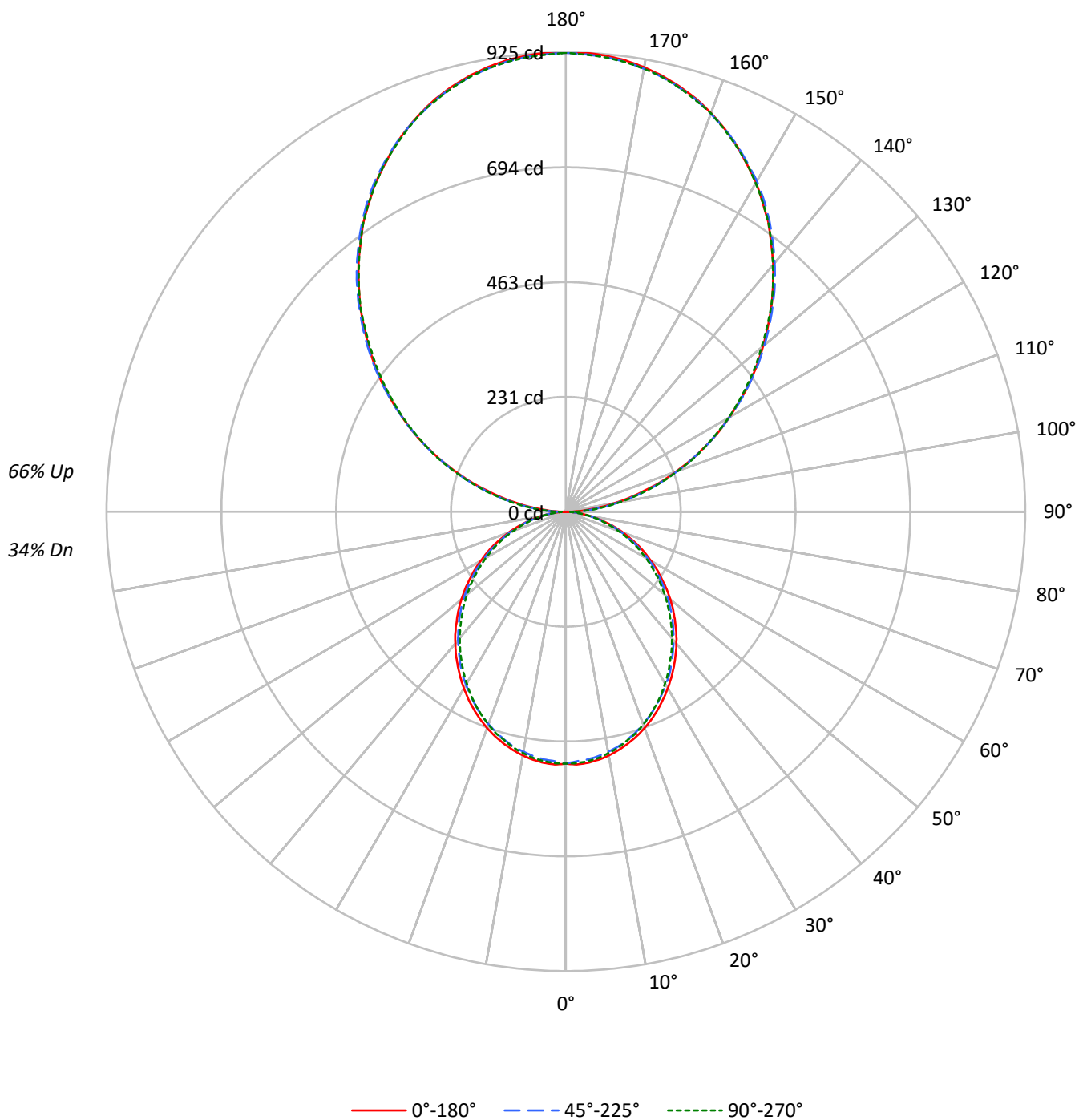
Lumens per Lamp: N/A
Luminaire Lumens: 3883.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	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°	5459	5459	5459
5°	5473	5271	5263
10°	5425	5092	5041
15°	5349	4907	4798
20°	5263	4701	4557
25°	5150	4483	4300
30°	5028	4259	4029
35°	4900	4029	3760
40°	4766	3787	3496
45°	4617	3552	3220
50°	4467	3291	2943
55°	4274	3017	2662
60°	4077	2717	2363
65°	3890	2391	2051
70°	3622	2029	1687
75°	3233	1607	1310
80°	2796	1130	925
85°	2180	607	463

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4617 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	1.2
10°-20°	135.0	3.5
20°-30°	199.4	5.1
30°-40°	232.9	6.0
40°-50°	234.1	6.0
50°-60°	205.7	5.3
60°-70°	153.2	3.9
70°-80°	87.2	2.2
80°-90°	26.7	0.7
90°-100°	59.5	1.5
100°-110°	180.1	4.6
110°-120°	306.6	7.9
120°-130°	403.3	10.4
130°-140°	453.4	11.7
140°-150°	445.7	11.5
150°-160°	375.2	9.7
160°-170°	249.8	6.4
170°-180°	87.5	2.3
0°-30°	382.2	9.8
0°-40°	615.1	15.8
0°-60°	1054.9	27.2
0°-90°	1321.9	34.0
90°-120°	546.2	14.1
90°-150°	1848.5	47.6
90°-180°	2561.0	66.0
0°-180°	3883.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	508	505	501	505	504	48
15°	483	482	476	479	477	136
25°	439	436	430	431	430	202
35°	379	377	371	368	366	237
45°	311	309	304	298	296	240
55°	236	236	230	225	223	211
65°	161	159	154	151	150	159
75°	85	83	82	80	78	91
85°	23	22	22	21	21	24
90°	1	8	17	20	22	5
95°	43	48	54	57	57	47
105°	163	165	171	171	173	175
115°	309	311	309	310	309	305
125°	452	454	452	449	446	403
135°	586	590	590	587	585	451
145°	711	712	714	714	711	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°	507.2	507.2	507.2	507.2	507.2
2.5°	509.4	507.6	502.8	507.2	506.8
5°	507.6	505.4	500.7	505.0	504.1
7.5°	503.7	501.5	496.7	500.7	500.2
10°	498.5	496.3	490.6	494.5	493.7
12.5°	491.5	489.7	484.5	487.1	486.7
15°	483.2	481.5	475.8	479.3	476.7
17.5°	474.0	471.9	466.2	468.8	467.9
20°	463.6	461.0	455.3	457.0	455.7
22.5°	451.8	449.2	443.5	444.8	443.1
25°	438.7	436.1	430.4	430.9	429.6
27.5°	425.2	422.6	416.5	416.9	415.6
30°	410.4	408.2	402.1	402.1	399.0
32.5°	395.5	392.5	388.1	385.1	383.8
35°	379.4	376.8	371.1	368.5	366.3
37.5°	363.3	359.8	354.1	351.1	349.8
40°	346.3	343.7	337.5	334.1	332.3
42.5°	329.3	326.2	320.1	316.6	314.9
45°	310.9	309.2	303.5	298.3	296.1
47.5°	293.1	290.4	285.2	280.0	278.2
50°	274.7	272.6	266.9	262.1	259.5
52.5°	255.6	254.3	248.1	244.2	241.6
55°	235.9	235.5	229.8	225.0	222.9
57.5°	217.6	215.9	211.5	207.2	204.5
60°	197.6	197.1	191.9	188.0	185.8
62.5°	179.7	178.4	173.1	169.2	167.9
65°	160.9	158.7	154.4	150.9	149.6
67.5°	140.9	139.1	135.6	132.6	130.8
70°	123.0	120.4	117.7	114.7	112.5
72.5°	104.2	102.5	99.4	96.8	95.9
75°	85.0	83.3	82.0	79.8	78.5
77.5°	68.0	67.2	65.4	63.7	63.7
80°	51.5	50.2	49.3	48.8	48.8
82.5°	35.3	35.3	35.3	34.5	34.0
85°	22.7	21.8	21.8	20.9	20.9
87.5°	11.3	10.0	9.6	9.2	9.2
90°	0.7	8.0	17.4	20.3	21.8
92.5°	21.8	26.1	30.5	32.7	31.2
95°	42.8	47.9	53.7	56.6	56.6
97.5°	70.4	74.1	78.4	82.0	81.3
100°	98.7	103.1	106.7	108.9	110.4
102.5°	131.4	133.6	138.7	140.9	140.1
105°	163.4	164.8	171.4	171.4	172.8
107.5°	201.1	201.8	204.8	206.9	206.2
110°	236.0	237.4	238.9	241.8	240.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	272.3	273.0	273.0	276.6	276.6
115°	308.6	310.8	309.3	310.0	309.3
117.5°	345.6	346.3	344.9	344.9	342.7
120°	379.7	384.1	380.5	379.7	378.3
122.5°	415.3	418.2	416.8	414.6	412.4
125°	451.6	453.8	452.3	449.4	446.5
127.5°	485.0	489.4	487.9	483.6	480.7
130°	518.4	524.2	522.0	519.1	514.1
132.5°	551.8	557.6	556.2	552.5	548.9
135°	585.9	590.3	589.6	586.7	585.2
137.5°	617.2	620.8	623.0	619.3	617.2
140°	649.8	653.5	654.2	653.5	648.4
142.5°	679.6	683.2	684.7	684.0	680.3
145°	710.8	712.3	714.5	713.7	710.8
147.5°	737.7	740.6	742.8	742.8	738.4
150°	766.0	767.5	768.9	768.9	764.6
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)