

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: P1037368

Luminaire Tested: S123DS-B775DB30-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DS-B775DB30-4F0-XX-W2A-D
Description: Define 3 Direct Surface with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

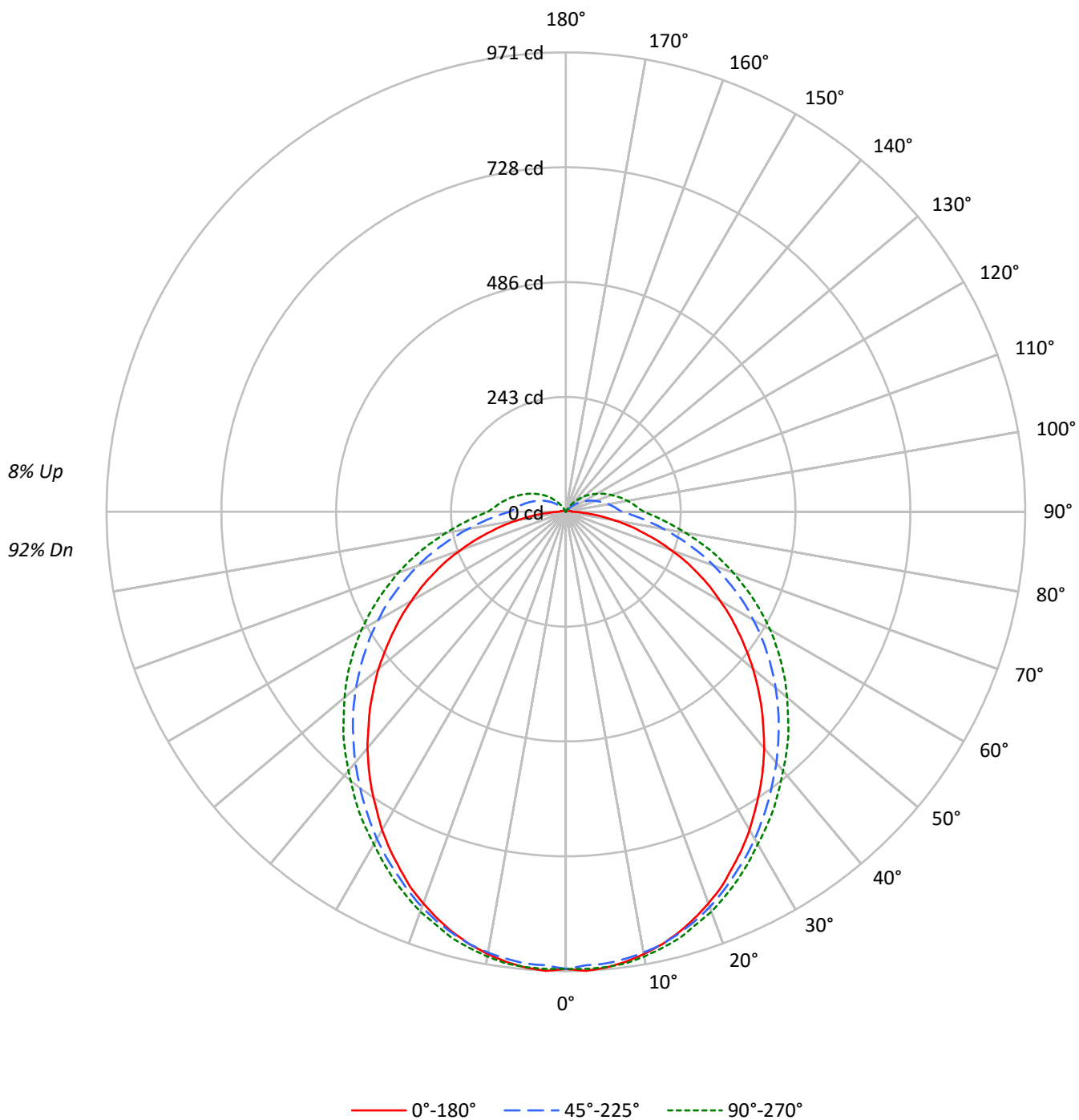
Lumens per Lamp: N/A
Luminaire Lumens: 3247.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
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: P1037368

CATALOG NUMBER: S123DS-B775DB30-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1037368

CATALOG NUMBER: S123DS-B775DB30-4F0-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
RCR																	
0	117	117	117	117	113	113	113	113	106	106	106		100	100	100		94
1	105	100	95	90	102	97	92	88	91	87	84		85	82	80		80
2	95	86	79	72	92	83	77	71	79	73	68		74	69	65		70
3	86	75	67	60	83	73	65	59	69	62	56		65	59	54		61
4	79	66	57	50	76	64	56	49	61	54	48		57	51	46		54
5	72	59	50	43	70	58	49	42	54	47	41		52	45	40		49
6	67	53	44	37	64	52	43	37	49	42	36		47	40	35		44
7	62	48	39	33	60	47	38	32	45	37	32		42	36	31		40
8	58	44	35	29	56	43	35	29	41	33	28		39	32	28		37
9	54	40	32	26	52	39	31	26	37	30	25		36	29	25		34
10	50	37	29	24	49	36	29	24	35	28	23		33	27	23		32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10399	10399	10399
5°	10451	10360	10439
10°	10376	10341	10434
15°	10262	10286	10391
20°	10090	10187	10307
25°	9874	10037	10200
30°	9654	9928	10085
35°	9405	9805	10068
40°	9168	9731	10041
45°	8908	9692	10124
50°	8654	9692	10222
55°	8374	9738	10428
60°	8112	9855	10740
65°	7855	10078	11151
70°	7452	10467	11858
75°	6958	11204	13175
80°	6459	13048	15918
85°	6373	19760	25478

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 45455 cd/sqm

TEST NUMBER: P1037368

CATALOG NUMBER: S123DS-B775DB30-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	2.8
10°-20°	261.3	8.0
20°-30°	390.7	12.0
30°-40°	466.5	14.4
40°-50°	488.1	15.0
50°-60°	458.0	14.1
60°-70°	382.6	11.8
70°-80°	273.6	8.4
80°-90°	162.8	5.0
90°-100°	102.3	3.2
100°-110°	75.2	2.3
110°-120°	50.2	1.5
120°-130°	28.7	0.9
130°-140°	12.9	0.4
140°-150°	2.7	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	743.6	22.9
0°-40°	1210.1	37.3
0°-60°	2156.2	66.4
0°-90°	2975.2	91.6
90°-120°	227.7	7.0
90°-150°	271.9	8.4
90°-180°	272.0	8.4
0°-180°	3247.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	967	965	959	967	966	92
15°	921	924	923	934	932	259
25°	831	842	845	859	859	383
35°	716	732	746	762	766	448
45°	585	610	637	657	665	451
55°	446	481	519	547	556	400
65°	308	349	396	427	438	305
75°	167	217	269	304	317	179
85°	52	104	160	196	206	53
90°	14	65	119	155	165	10
95°	12	53	104	137	147	9
105°	8	34	79	108	118	9
115°	5	18	56	81	90	6
125°	3	3	34	56	63	3
135°	2	1	13	32	37	2
145°	1	0	0	8	13	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: P1037368

CATALOG NUMBER: S123DS-B775DB30-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	966.1	966.1	966.1	966.1	966.1
2.5°	971.4	968.2	959.8	968.2	967.2
5°	967.2	965.1	958.8	967.2	966.1
7.5°	959.8	959.8	953.5	964.0	963.0
10°	949.3	951.4	946.1	956.7	954.6
12.5°	936.7	939.8	936.7	946.1	944.0
15°	920.9	924.0	923.0	933.5	932.5
17.5°	901.9	908.3	907.2	916.7	914.6
20°	880.9	887.2	889.3	898.8	899.8
22.5°	858.8	865.1	868.3	880.9	879.8
25°	831.4	842.0	845.1	858.8	858.8
27.5°	805.1	816.7	823.0	834.6	835.6
30°	776.7	790.4	798.8	811.4	811.4
32.5°	745.1	760.9	772.5	786.2	789.3
35°	715.7	732.5	746.2	762.0	766.2
37.5°	684.1	703.0	718.8	736.7	739.9
40°	652.5	671.5	692.5	710.4	714.6
42.5°	617.8	642.0	664.1	684.1	690.4
45°	585.2	610.4	636.7	656.7	665.1
47.5°	550.4	578.8	608.3	630.4	636.7
50°	516.8	546.2	578.8	603.1	610.4
52.5°	481.0	512.5	549.4	574.6	584.1
55°	446.2	481.0	518.9	547.3	555.7
57.5°	412.6	448.3	489.4	517.8	527.3
60°	376.8	414.7	457.8	487.3	498.9
62.5°	343.1	382.0	428.3	457.8	468.3
65°	308.4	349.4	395.7	427.3	437.8
67.5°	273.6	316.8	363.1	397.8	406.2
70°	236.8	282.1	332.6	366.3	376.8
72.5°	203.1	248.4	301.0	335.7	346.3
75°	167.3	216.8	269.4	304.2	316.8
77.5°	136.8	186.3	238.9	275.7	285.2
80°	104.2	155.8	210.5	246.3	256.8
82.5°	75.8	128.4	184.2	220.0	230.5
85°	51.6	104.2	160.0	195.8	206.3
87.5°	31.6	84.2	137.9	173.7	184.2
90°	13.7	65.3	118.9	154.7	165.2
92.5°	12.6	57.9	110.5	145.2	154.7
95°	11.6	52.6	104.2	136.8	147.3
97.5°	10.5	48.4	97.9	129.5	140.0
100°	9.5	43.2	91.6	122.1	132.6
102.5°	8.4	37.9	85.2	114.7	125.2
105°	8.4	33.7	78.9	108.4	117.9
107.5°	7.4	29.5	72.6	101.0	110.5
110°	6.3	25.3	67.4	94.7	103.1



TEST NUMBER: P1037368

CATALOG NUMBER: S123DS-B775DB30-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	6.3	21.0	61.0	87.4	96.8
115°	5.3	17.9	55.8	81.0	89.5
117.5°	5.3	13.7	49.5	74.7	83.1
120°	4.2	9.5	44.2	68.4	75.8
122.5°	4.2	6.3	38.9	62.1	69.5
125°	3.2	3.2	33.7	55.8	63.1
127.5°	3.2	2.1	28.4	49.5	56.8
130°	3.2	2.1	23.2	43.2	49.5
132.5°	2.1	2.1	17.9	36.8	44.2
135°	2.1	1.1	12.6	31.6	36.8
137.5°	2.1	1.1	8.4	25.3	30.5
140°	1.1	1.1	4.2	20.0	25.3
142.5°	1.1	0.0	0.0	13.7	18.9
145°	1.1	0.0	0.0	8.4	12.6
147.5°	0.0	0.0	0.0	3.2	7.4
150°	0.0	0.0	0.0	0.0	2.1
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)