

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: P1037578

Luminaire Tested: S123RDS-B775DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDS-B775DB50-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Surface with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

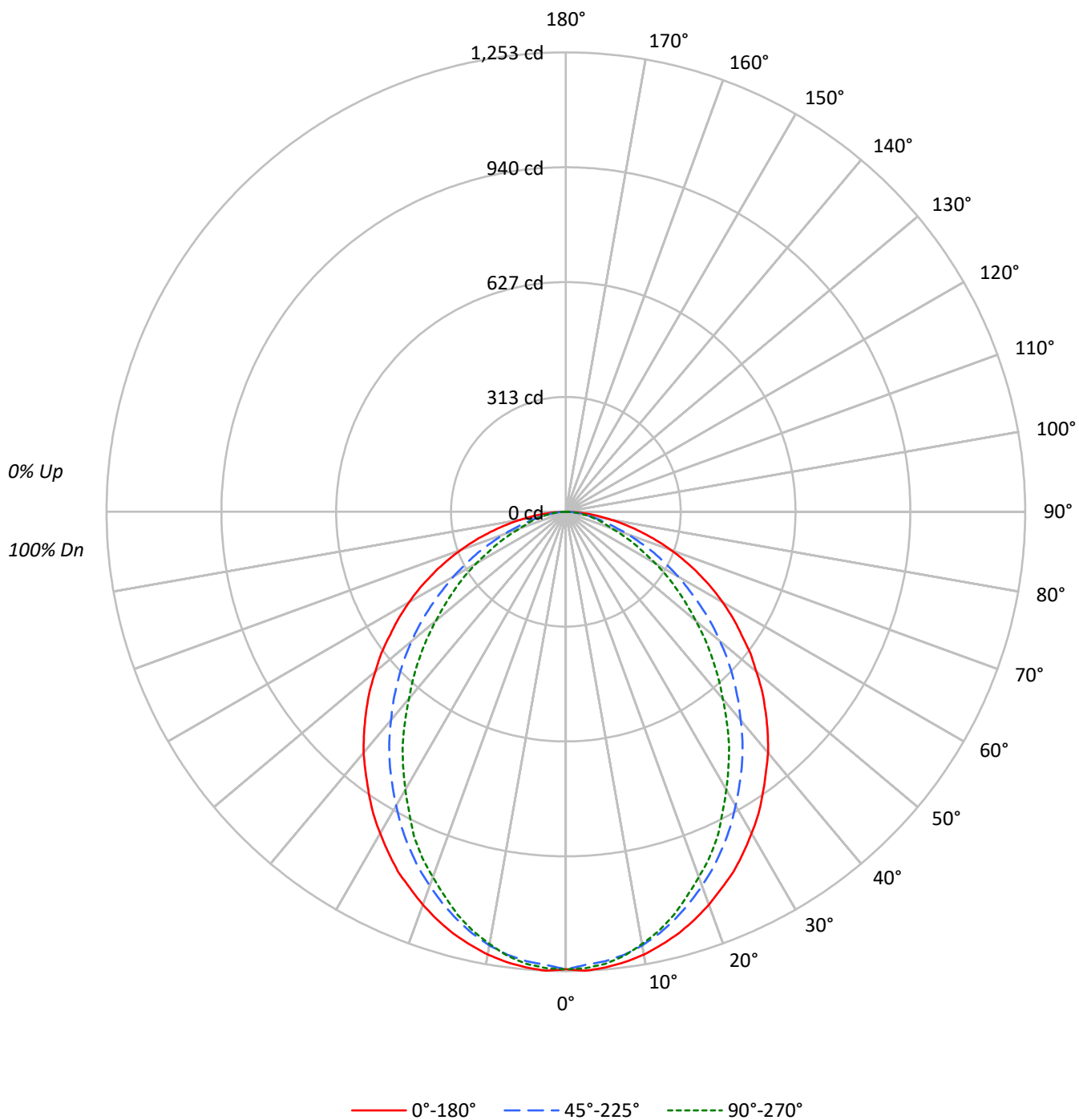
Lumens per Lamp: N/A
Luminaire Lumens: 2819.0 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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: P1037578

CATALOG NUMBER: S123RDS-B775DB50-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1037578

CATALOG NUMBER: S123RDS-B775DB50-4F0-XX-W2A-F

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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	93	90		91
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	92	82	75	68	90	81	74	68	78	72	67		75	70	66		73
4	85	73	65	59	83	72	64	58	70	63	58		67	62	57		65
5	78	66	57	51	76	65	57	51	63	56	50		61	55	50		59
6	73	60	51	45	71	59	51	45	57	50	45		55	49	44		54
7	67	54	46	40	66	54	46	40	52	45	40		51	44	39		49
8	63	50	42	36	61	49	41	36	48	41	36		47	40	36		46
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		42
10	55	43	35	30	54	42	35	30	41	34	30		40	34	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13431	13431	13431
5°	13483	13297	13373
10°	13406	13129	13085
15°	13262	12822	12687
20°	13064	12439	12149
25°	12860	12007	11623
30°	12591	11509	10880
35°	12314	11010	10200
40°	12059	10423	9357
45°	11723	9844	8596
50°	11354	9185	7745
55°	10976	8432	6951
60°	10633	7625	6077
65°	10180	6752	5206
70°	9618	5668	4205
75°	8796	4462	3955
80°	7841	3955	3639
85°	6620	3495	3248

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11723 cd/sqm

TEST NUMBER: P1037578

CATALOG NUMBER: S123RDS-B775DB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.3	4.2
10°-20°	326.3	11.6
20°-30°	469.8	16.7
30°-40°	529.1	18.8
40°-50°	506.1	18.0
50°-60°	414.3	14.7
60°-70°	279.3	9.9
70°-80°	140.1	5.0
80°-90°	36.6	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	913.4	32.4
0°-40°	1442.6	51.2
0°-60°	2363.0	83.8
0°-90°	2819.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2819.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1248	1243	1231	1240	1238	118
15°	1190	1179	1151	1146	1138	335
25°	1083	1058	1011	990	979	498
35°	937	901	838	794	776	587
45°	770	725	647	589	565	594
55°	585	535	449	391	370	525
65°	400	344	265	216	204	396
75°	212	163	107	97	95	225
85°	54	31	28	26	26	62
90°	0	0	0	0	0	

TEST NUMBER: P1037578

CATALOG NUMBER: S123RDS-B775DB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.8	1247.8	1247.8	1247.8	1247.8
2.5°	1252.9	1248.8	1236.7	1247.8	1245.8
5°	1247.8	1242.7	1230.6	1239.7	1237.7
7.5°	1238.7	1233.6	1218.5	1224.5	1221.5
10°	1226.5	1219.5	1201.2	1202.3	1197.2
12.5°	1209.3	1201.2	1178.0	1177.0	1170.9
15°	1190.1	1179.0	1150.6	1145.6	1138.5
17.5°	1166.8	1154.7	1119.3	1109.2	1099.0
20°	1140.5	1124.3	1085.9	1072.7	1060.6
22.5°	1111.2	1092.0	1050.5	1033.3	1022.1
25°	1082.8	1057.5	1011.0	989.7	978.6
27.5°	1048.4	1021.1	970.5	942.2	925.0
30°	1013.0	982.7	926.0	891.6	875.4
32.5°	977.6	942.2	881.5	843.0	825.8
35°	937.1	900.7	837.9	794.4	776.2
37.5°	896.6	857.2	791.4	742.8	720.5
40°	858.2	813.7	741.8	689.2	665.9
42.5°	814.7	770.1	695.2	636.5	616.3
45°	770.1	724.6	646.7	589.0	564.7
47.5°	726.6	676.0	599.1	536.4	515.1
50°	678.0	630.5	548.5	485.8	462.5
52.5°	634.5	581.9	500.9	435.2	414.9
55°	584.9	535.3	449.3	390.6	370.4
57.5°	540.4	486.8	399.7	344.1	326.9
60°	493.9	438.2	354.2	299.6	282.3
62.5°	447.3	391.6	307.6	257.0	238.8
65°	399.7	344.1	265.1	215.6	204.4
67.5°	352.2	295.5	218.6	181.1	169.0
70°	305.6	251.0	180.1	144.7	133.6
72.5°	259.1	205.4	142.7	115.4	112.3
75°	211.5	162.9	107.3	97.2	95.1
77.5°	168.0	123.5	84.0	77.9	75.9
80°	126.5	85.0	63.8	60.7	58.7
82.5°	87.0	52.6	45.5	42.5	42.5
85°	53.6	31.4	28.3	26.3	26.3
87.5°	24.3	13.2	13.2	12.1	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)