

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: P995009

Luminaire Tested: S123RDR-B775DB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P995009
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: S123RDR-B775DB2750-4F0-XX-W2A-F_4000K
Description: Define 3 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

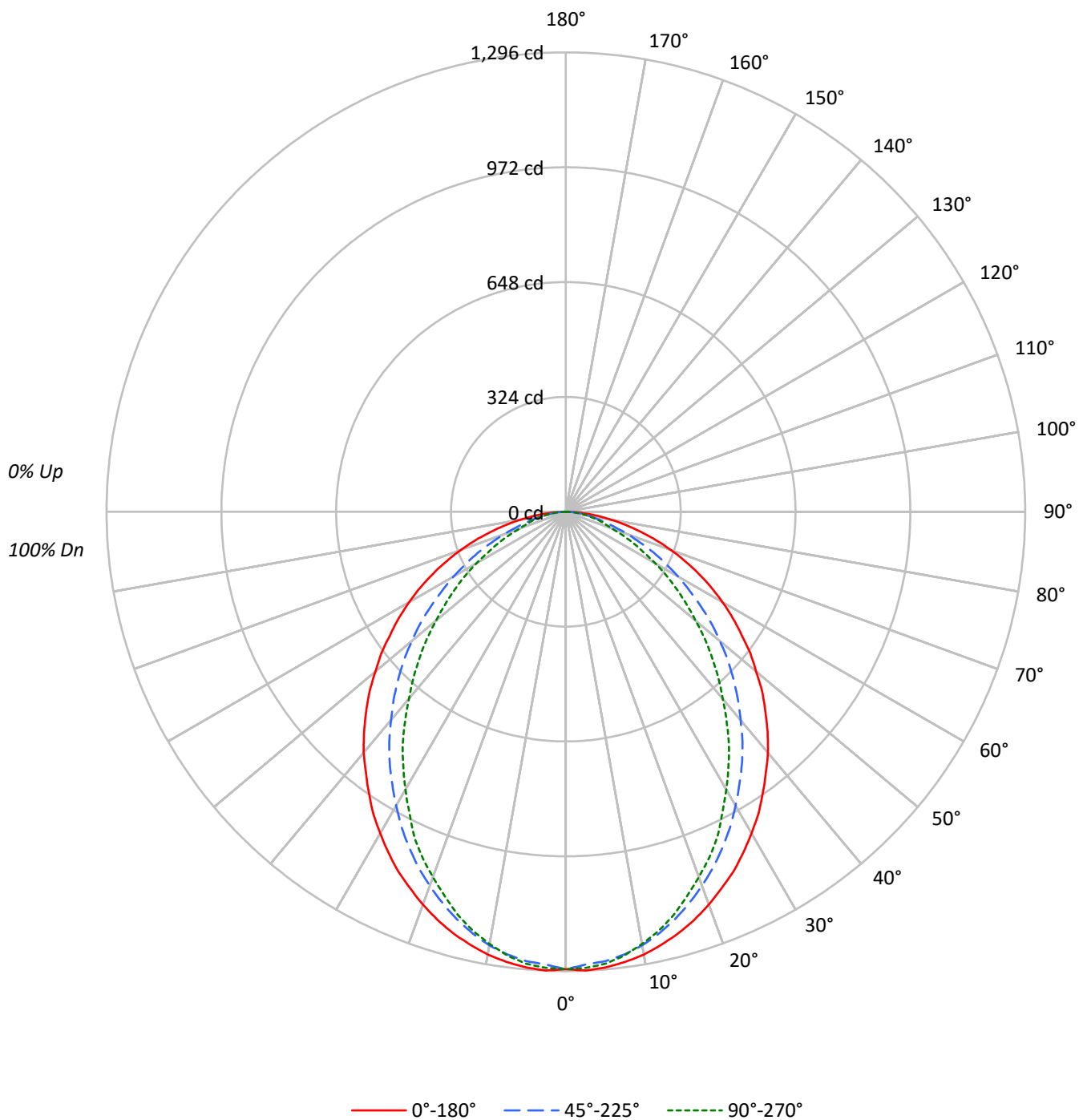
Lumens per Lamp: N/A
Luminaire Lumens: 2915.0 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10		0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102		100
1	110	105	101	98	107	103	99	96	99	96	93		95	93	90		91	89	88		86
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81	78	75		73
3	92	82	75	68	90	81	74	68	78	72	67		75	70	66		73	68	64		62
4	85	73	65	59	83	72	64	58	70	63	58		67	62	57		65	60	56		54
5	78	66	57	51	76	65	57	51	63	56	50		61	55	50		59	54	49		47
6	73	60	51	45	71	59	51	45	57	50	45		55	49	44		54	48	44		42
7	67	54	46	40	66	54	46	40	52	45	40		51	44	39		49	44	39		37
8	63	50	42	36	61	49	41	36	48	41	36		47	40	36		46	40	35		34
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		42	36	32		30
10	55	43	35	30	54	42	35	30	41	34	30		40	34	29		39	34	29		28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13889	13889	13889
5°	13942	13749	13828
10°	13862	13577	13531
15°	13713	13259	13119
20°	13510	12863	12562
25°	13298	12416	12018
30°	13019	11901	11251
35°	12733	11386	10546
40°	12469	10779	9676
45°	12123	10179	8888
50°	11740	9498	8008
55°	11352	8719	7187
60°	10994	7886	6286
65°	10529	6984	5384
70°	9945	5863	4346
75°	9095	4612	4092
80°	8108	4085	3763
85°	6854	3619	3359

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12123 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.3	4.2
10°-20°	337.4	11.6
20°-30°	485.8	16.7
30°-40°	547.1	18.8
40°-50°	523.3	18.0
50°-60°	428.4	14.7
60°-70°	288.8	9.9
70°-80°	144.9	5.0
80°-90°	37.9	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°	944.5	32.4
0°-40°	1491.7	51.2
0°-60°	2443.4	83.8
0°-90°	2915.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2915.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1290	1290	1290	1290	1290	
5°	1290	1285	1272	1282	1280	122
15°	1231	1219	1190	1185	1177	347
25°	1120	1094	1045	1023	1012	515
35°	969	931	866	822	803	607
45°	796	749	669	609	584	615
55°	605	554	465	404	383	542
65°	413	356	274	223	211	409
75°	219	168	111	100	98	233
85°	56	32	29	27	27	64
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1290.3	1290.3	1290.3	1290.3	1290.3
2.5°	1295.5	1291.3	1278.8	1290.3	1288.2
5°	1290.3	1285.1	1272.5	1281.9	1279.8
7.5°	1280.9	1275.6	1259.9	1266.2	1263.1
10°	1268.3	1261.0	1242.2	1243.2	1238.0
12.5°	1250.5	1242.2	1218.1	1217.0	1210.8
15°	1230.6	1219.1	1189.8	1184.6	1177.3
17.5°	1206.6	1194.0	1157.4	1146.9	1136.5
20°	1179.4	1162.6	1122.9	1109.3	1096.7
22.5°	1149.0	1129.1	1086.2	1068.4	1056.9
25°	1119.7	1093.6	1045.4	1023.4	1011.9
27.5°	1084.1	1055.9	1003.6	974.3	956.5
30°	1047.5	1016.1	957.5	921.9	905.2
32.5°	1010.9	974.3	911.5	871.7	853.9
35°	969.0	931.4	866.5	821.5	802.6
37.5°	927.2	886.4	818.3	768.1	745.1
40°	887.4	841.4	767.1	712.6	688.6
42.5°	842.4	796.4	718.9	658.2	637.3
45°	796.4	749.3	668.7	609.0	583.9
47.5°	751.4	699.0	619.5	554.6	532.7
50°	701.1	651.9	567.2	502.3	478.2
52.5°	656.1	601.7	518.0	450.0	429.1
55°	604.9	553.6	464.6	403.9	383.0
57.5°	558.8	503.4	413.4	355.8	338.0
60°	510.7	453.1	366.3	309.8	292.0
62.5°	462.5	405.0	318.1	265.8	247.0
65°	413.4	355.8	274.2	222.9	211.4
67.5°	364.2	305.6	226.0	187.3	174.8
70°	316.0	259.5	186.3	149.6	138.1
72.5°	267.9	212.4	147.6	119.3	116.2
75°	218.7	168.5	110.9	100.5	98.4
77.5°	173.7	127.7	86.9	80.6	78.5
80°	130.8	87.9	65.9	62.8	60.7
82.5°	90.0	54.4	47.1	44.0	44.0
85°	55.5	32.4	29.3	27.2	27.2
87.5°	25.1	13.6	13.6	12.6	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)