

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: P1007206

Luminaire Tested: S125RDR-B850DB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007206
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-B850DB2750-4F0-XX-W2A-F_2700K
Description: Define 5 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

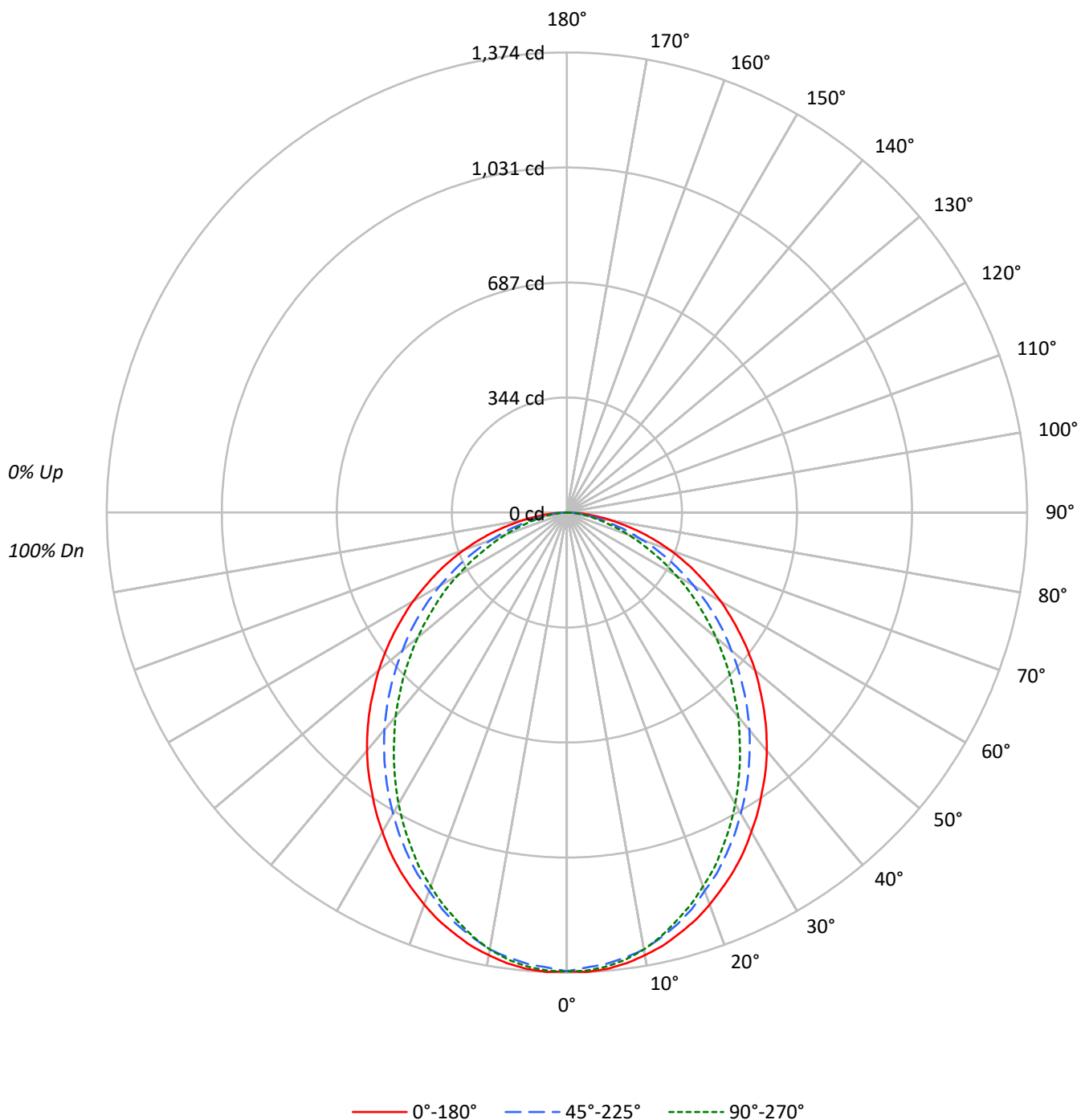
Lumens per Lamp: N/A
Luminaire Lumens: 3238.0 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
Input Voltage (V): 120
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: P1007206

CATALOG NUMBER: S125RDR-B850DB2750-4F0-XX-W2A-F_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P1007206

CATALOG NUMBER: S125RDR-B850DB2750-4F0-XX-W2A-F_2700K

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	109	105	101	97	107	103	99	96	99	96	93		95	92	90		91	89	87		85
2	100	92	86	80	98	90	84	79	87	82	78		84	79	76		81	77	74		72
3	92	82	74	68	89	80	73	67	77	71	66		74	69	65		72	67	64		61
4	84	73	64	58	82	71	64	57	69	62	57		67	61	56		64	59	55		53
5	78	65	57	50	76	64	56	50	62	55	49		60	54	49		58	53	48		46
6	72	59	50	44	70	58	50	44	56	49	44		55	48	43		53	47	43		41
7	67	54	45	39	65	53	45	39	51	44	39		50	43	39		49	43	38		36
8	62	49	41	35	61	48	41	35	47	40	35		46	39	35		45	39	34		33
9	58	45	37	32	57	45	37	32	44	37	32		42	36	31		41	36	31		29
10	55	42	34	29	54	41	34	29	40	34	29		39	33	29		39	33	29		27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8781	8781	8781
5°	8801	8701	8755
10°	8735	8620	8620
15°	8630	8445	8376
20°	8498	8201	8102
25°	8342	7962	7786
30°	8148	7681	7436
35°	7951	7392	7044
40°	7766	7091	6658
45°	7541	6753	6238
50°	7315	6386	5798
55°	7053	6035	5331
60°	6792	5611	4828
65°	6481	5115	4253
70°	6128	4498	3664
75°	5637	3792	3050
80°	4966	2978	2561
85°	4183	2433	2286

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 7541 cd/sqm

TEST NUMBER: P1007206

CATALOG NUMBER: S125RDR-B850DB2750-4F0-XX-W2A-F_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.0	4.0
10°-20°	360.5	11.1
20°-30°	522.7	16.1
30°-40°	595.5	18.4
40°-50°	580.4	17.9
50°-60°	488.5	15.1
60°-70°	342.3	10.6
70°-80°	175.5	5.4
80°-90°	43.8	1.4
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°	1012.1	31.3
0°-40°	1607.6	49.6
0°-60°	2676.5	82.7
0°-90°	3238.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3238.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1368	1364	1353	1363	1361	130
15°	1301	1295	1273	1272	1263	367
25°	1180	1164	1126	1113	1101	543
35°	1016	992	945	915	901	637
45°	832	802	745	704	688	642
55°	631	598	540	494	477	565
65°	428	392	337	296	280	423
75°	228	197	153	130	123	241
85°	57	38	33	32	31	66
90°	0	0	0	0	0	

TEST NUMBER: P1007206

CATALOG NUMBER: S125RDR-B850DB2750-4F0-XX-W2A-F_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1370.5	1370.5	1370.5	1370.5	1370.5
2.5°	1373.6	1370.5	1360.1	1370.5	1369.5
5°	1368.4	1364.3	1352.9	1363.3	1361.2
7.5°	1358.1	1353.9	1340.5	1348.8	1346.7
10°	1342.6	1339.4	1325.0	1328.1	1325.0
12.5°	1325.0	1320.8	1300.1	1302.2	1297.0
15°	1301.1	1294.9	1273.2	1272.2	1262.8
17.5°	1276.3	1267.0	1241.1	1235.9	1228.7
20°	1246.3	1235.9	1202.8	1197.6	1188.3
22.5°	1213.2	1202.8	1167.6	1156.2	1149.0
25°	1180.0	1164.5	1126.2	1112.8	1101.4
27.5°	1142.8	1124.1	1083.8	1066.2	1054.8
30°	1101.4	1081.7	1038.2	1014.4	1005.1
32.5°	1061.0	1037.2	992.7	965.8	953.3
35°	1016.5	991.6	945.1	915.0	900.6
37.5°	974.0	944.0	896.4	861.2	846.7
40°	928.5	897.4	847.8	808.4	796.0
42.5°	880.9	848.8	797.0	759.8	740.1
45°	832.2	802.2	745.3	703.9	688.4
47.5°	781.5	750.5	693.5	651.1	633.5
50°	733.9	699.7	640.7	597.3	581.7
52.5°	682.1	646.9	592.1	544.5	528.9
55°	631.4	598.3	540.3	493.8	477.2
57.5°	579.7	544.5	488.6	443.0	428.5
60°	530.0	493.8	437.9	392.3	376.8
62.5°	477.2	443.0	386.1	344.7	329.2
65°	427.5	392.3	337.4	296.0	280.5
67.5°	377.8	342.6	289.8	250.5	238.1
70°	327.1	291.9	240.1	208.1	195.6
72.5°	277.4	243.3	195.6	166.7	159.4
75°	227.7	196.7	153.2	130.4	123.2
77.5°	177.0	152.2	115.9	98.3	92.1
80°	134.6	109.7	80.7	71.4	69.4
82.5°	93.2	71.4	53.8	50.7	49.7
85°	56.9	38.3	33.1	32.1	31.1
87.5°	23.8	16.6	15.5	15.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)