

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: P1038276

Luminaire Tested: S125RDS-B850DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1038276
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: S125RDS-B850DB40-4F0-XX-W2A-F
Description: Define 5 Regressed Direct Surface with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

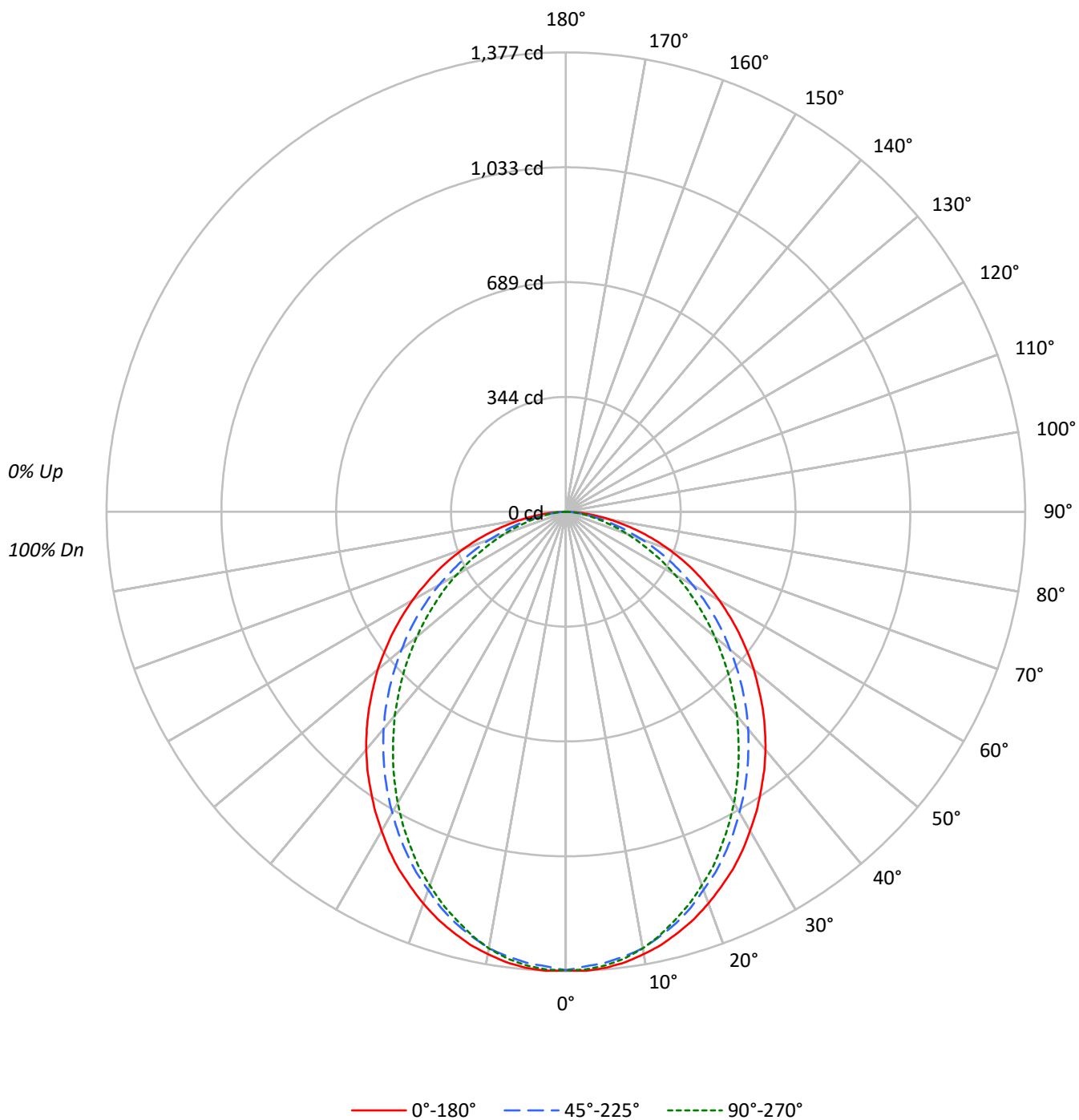
Lumens per Lamp: N/A
Luminaire Lumens: 3247.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
Input Voltage (V):
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: P1038276

CATALOG NUMBER: S125RDS-B850DB40-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1038276

CATALOG NUMBER: S125RDS-B850DB40-4F0-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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	87	87	85
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	74	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	64	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	55	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	48	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	43	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	38	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	34	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	31	31	29
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8805	8805	8805
5°	8825	8726	8779
10°	8759	8644	8644
15°	8655	8468	8400
20°	8521	8224	8125
25°	8365	7984	7807
30°	8171	7702	7457
35°	7973	7413	7064
40°	7788	7110	6676
45°	7561	6772	6255
50°	7335	6404	5815
55°	7073	6052	5345
60°	6811	5627	4841
65°	6499	5130	4265
70°	6144	4511	3675
75°	5654	3802	3057
80°	4977	2989	2564
85°	4198	2441	2286

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7561 cd/sqm

TEST NUMBER: P1038276

CATALOG NUMBER: S125RDS-B850DB40-4FO-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.3	4.0
10°-20°	361.5	11.1
20°-30°	524.1	16.1
30°-40°	597.1	18.4
40°-50°	582.0	17.9
50°-60°	489.8	15.1
60°-70°	343.3	10.6
70°-80°	176.0	5.4
80°-90°	43.9	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°	1014.9	31.3
0°-40°	1612.1	49.6
0°-60°	2683.9	82.7
0°-90°	3247.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3247.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1374	1374	1374	1374	1374	
5°	1372	1368	1357	1367	1365	130
15°	1305	1298	1277	1276	1266	368
25°	1183	1168	1129	1116	1104	545
35°	1019	994	948	918	903	638
45°	834	804	747	706	690	644
55°	633	600	542	495	478	566
65°	429	393	338	297	281	425
75°	228	197	154	131	124	241
85°	57	38	33	32	31	66
90°	0	0	0	0	0	

TEST NUMBER: P1038276

CATALOG NUMBER: S125RDS-B850DB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.3	1374.3	1374.3	1374.3	1374.3
2.5°	1377.4	1374.3	1363.9	1374.3	1373.3
5°	1372.2	1368.1	1356.7	1367.0	1365.0
7.5°	1361.9	1357.7	1344.2	1352.5	1350.4
10°	1346.3	1343.2	1328.6	1331.7	1328.6
12.5°	1328.6	1324.5	1303.7	1305.8	1300.6
15°	1304.8	1298.5	1276.7	1275.7	1266.4
17.5°	1279.8	1270.5	1244.6	1239.4	1232.1
20°	1249.7	1239.4	1206.2	1201.0	1191.6
22.5°	1216.5	1206.2	1170.9	1159.4	1152.2
25°	1183.3	1167.7	1129.3	1115.8	1104.4
27.5°	1145.9	1127.3	1086.8	1069.1	1057.7
30°	1104.4	1084.7	1041.1	1017.2	1007.9
32.5°	1063.9	1040.1	995.4	968.5	956.0
35°	1019.3	994.4	947.7	917.6	903.1
37.5°	976.8	946.7	898.9	863.6	849.1
40°	931.1	899.9	850.1	810.7	798.2
42.5°	883.3	851.2	799.3	761.9	742.2
45°	834.5	804.4	747.4	705.8	690.3
47.5°	783.7	752.5	695.5	652.9	635.3
50°	735.9	701.7	642.5	598.9	583.4
52.5°	684.0	648.7	593.7	546.0	530.4
55°	633.2	600.0	541.8	495.1	478.5
57.5°	581.3	546.0	489.9	444.3	429.7
60°	531.5	495.1	439.1	393.4	377.8
62.5°	478.5	444.3	387.2	345.7	330.1
65°	428.7	393.4	338.4	296.9	281.3
67.5°	378.9	343.6	290.6	251.2	238.7
70°	328.0	292.7	240.8	208.6	196.2
72.5°	278.2	243.9	196.2	167.1	159.9
75°	228.4	197.2	153.6	130.8	123.5
77.5°	177.5	152.6	116.3	98.6	92.4
80°	134.9	110.0	81.0	71.6	69.5
82.5°	93.4	71.6	54.0	50.9	49.8
85°	57.1	38.4	33.2	32.2	31.1
87.5°	23.9	16.6	15.6	15.6	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)