

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: P1036080

Luminaire Tested: S125RDIW-B850D1050UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

**Test Information**

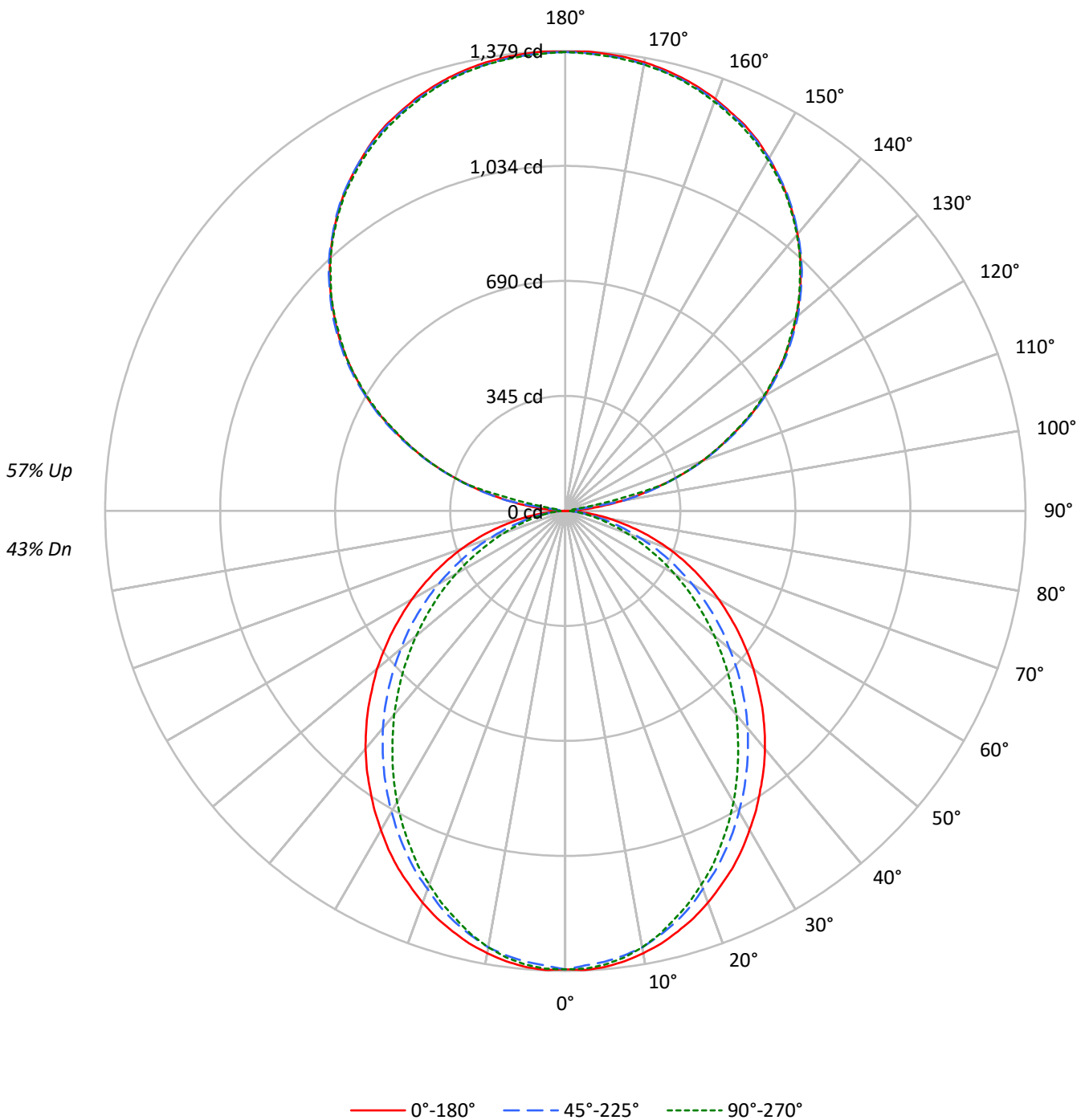
Test Method: LM-79-2019  
Report Number: P1036080  
REPORT IS A COMBINATION OF REPORTS P1006834 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-B850D1050UB40-4F0-XX-W2A-F  
Description: Define 5 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}  
{m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7475.0 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 67.4  
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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	43				43
1	97	92	89	85	88	85	81	78	70	68	66	57	55	54	45	44	43	37				37
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	39	38	36	31				31
3	80	71	64	58	73	65	59	54	55	50	46	44	41	38	35	33	31	27				27
4	74	63	55	49	67	58	51	46	49	43	39	40	36	33	31	29	27	23				23
5	68	56	48	42	62	52	45	40	43	38	34	36	32	29	28	26	23	20				20
6	62	50	42	37	57	47	40	34	39	34	30	32	28	25	26	23	21	18				18
7	58	46	38	32	53	42	35	30	36	30	26	29	25	22	24	21	18	16				16
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	22	19	17	14				14
9	50	38	30	25	45	35	28	24	30	25	21	25	21	18	20	17	15	13				13
10	46	35	27	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12				12

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8805	8805	8805
5°	8806	8586	8600
10°	8720	8369	8296
15°	8597	8066	7896
20°	8444	7703	7477
25°	8269	7346	7027
30°	8054	6955	6556
35°	7835	6558	6054
40°	7628	6150	5564
45°	7377	5710	5052
50°	7123	5242	4530
55°	6829	4782	3989
60°	6528	4255	3428
65°	6169	3667	2823
70°	5750	2985	2222
75°	5172	2244	1619
80°	4359	1454	1091
85°	3265	781	614

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7377 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.3	1.7
10°-20°	361.5	4.8
20°-30°	524.1	7.0
30°-40°	597.1	8.0
40°-50°	582.0	7.8
50°-60°	489.8	6.6
60°-70°	343.3	4.6
70°-80°	176.0	2.4
80°-90°	45.9	0.6
90°-100°	46.7	0.6
100°-110°	310.5	4.2
110°-120°	559.1	7.5
120°-130°	717.7	9.6
130°-140°	771.9	10.3
140°-150°	724.4	9.7
150°-160°	586.0	7.8
160°-170°	379.0	5.1
170°-180°	130.7	1.7
0°-30°	1014.9	13.6
0°-40°	1612.1	21.6
0°-60°	2683.9	35.9
0°-90°	3249.0	43.5
90°-120°	916.3	12.3
90°-150°	3130.3	41.9
90°-180°	4226.0	56.5
0°-180°	7475.0	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	63
90°	1	9	16	21	24	6
95°	58	55	16	21	21	71
105°	300	304	304	304	303	318
115°	563	568	569	565	559	558
125°	801	808	808	804	801	715
135°	998	1004	1002	1000	994	770
145°	1158	1160	1160	1161	1154	724
155°	1275	1269	1271	1274	1266	587
165°	1345	1339	1340	1346	1338	380
175°	1376	1370	1371	1379	1370	131
180°	1376	1376	1376	1376	1376	



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**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°	1.0	9.2	16.3	21.4	24.5
92.5°	19.4	10.2	16.3	21.4	22.4
95°	58.1	55.1	16.3	21.4	21.4
97.5°	109.1	115.2	18.4	20.4	21.4
100°	170.3	173.4	177.4	25.5	21.4
102.5°	232.5	236.6	238.6	240.7	155.0
105°	299.8	303.9	303.9	303.9	302.9
107.5°	369.2	369.2	371.2	372.2	368.2
110°	436.5	436.5	438.5	435.5	436.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	499.7	502.8	503.8	499.7	497.7
115°	562.9	568.0	569.1	565.0	558.9
117.5°	629.2	629.2	633.3	627.2	625.1
120°	690.4	689.4	692.5	690.4	685.3
122.5°	744.5	749.6	750.6	748.5	742.4
125°	800.6	807.7	807.7	803.6	800.6
127.5°	854.6	859.7	858.7	856.6	848.5
130°	903.6	908.7	909.7	906.6	901.5
132.5°	952.5	958.6	955.6	955.6	950.5
135°	998.4	1004.5	1002.5	1000.4	994.3
137.5°	1041.2	1047.4	1045.3	1045.3	1040.2
140°	1083.0	1085.1	1084.1	1086.1	1080.0
142.5°	1120.8	1121.8	1123.8	1123.8	1117.7
145°	1157.5	1159.5	1159.5	1160.6	1154.4
147.5°	1190.1	1190.1	1191.1	1192.2	1185.0
150°	1220.7	1218.7	1220.7	1222.8	1214.6
152.5°	1250.3	1245.2	1247.2	1249.3	1242.1
155°	1274.8	1268.7	1270.7	1273.8	1265.6
157.5°	1294.1	1291.1	1291.1	1294.1	1286.0
160°	1314.5	1308.4	1309.4	1313.5	1305.4
162.5°	1330.9	1324.7	1325.8	1331.9	1322.7
165°	1345.1	1339.0	1340.0	1346.2	1338.0
167.5°	1356.4	1350.2	1351.3	1358.4	1349.2
170°	1365.5	1358.4	1359.4	1367.6	1358.4
172.5°	1371.7	1364.5	1366.6	1373.7	1364.5
175°	1375.7	1369.6	1370.6	1378.8	1369.6
177.5°	1378.8	1372.7	1373.7	1380.8	1372.7
180°	1375.7	1375.7	1375.7	1375.7	1375.7

(END OF REPORT)