

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: P1036138

Luminaire Tested: S125RDIW-B850D470UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1036138
REPORT IS A COMBINATION OF REPORTS P1006966 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDIW-B850D470UB40-4F0-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

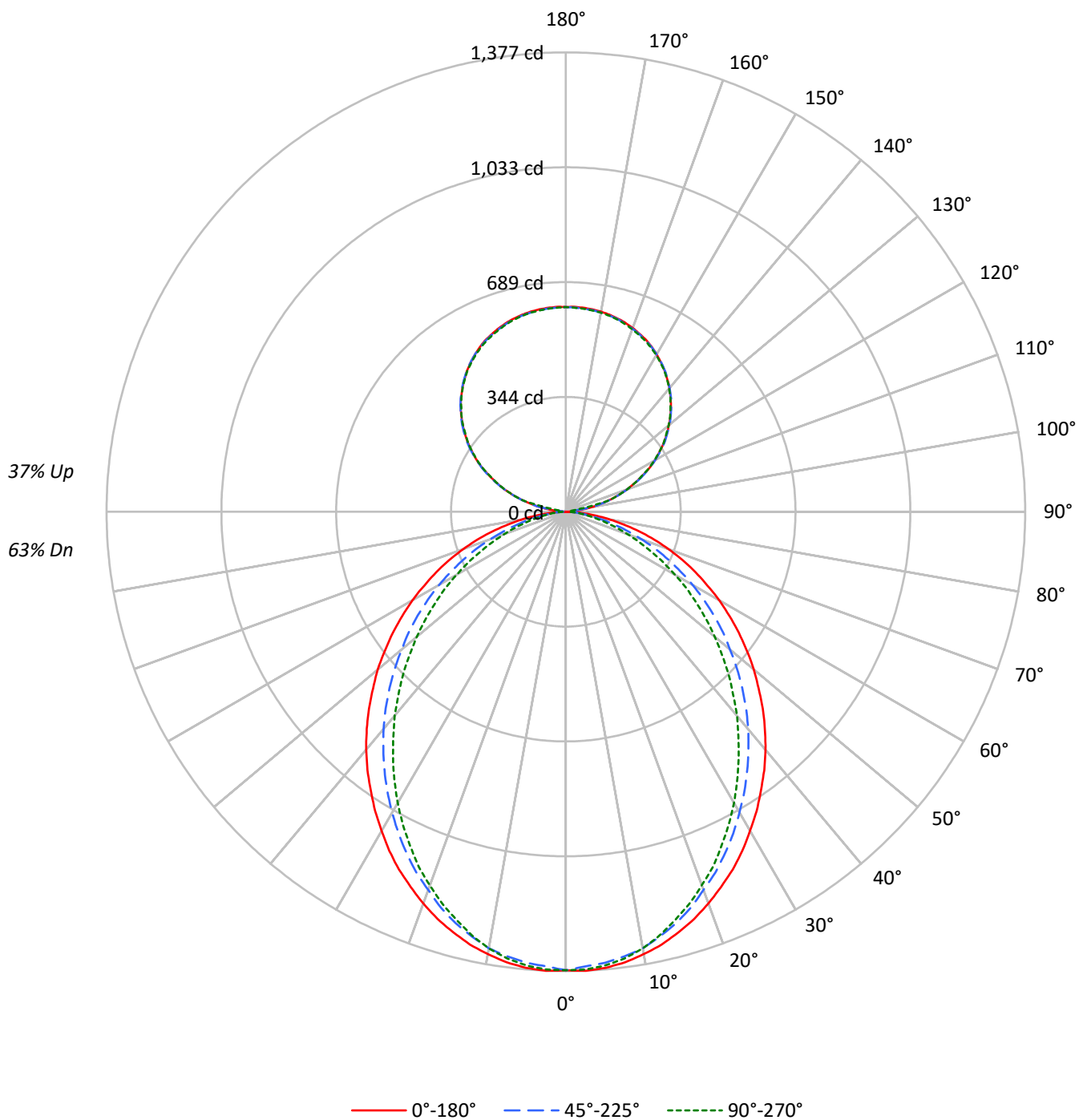
Lumens per Lamp: N/A
Luminaire Lumens: 5133.0 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 49.1
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
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68
1	101	97	93	89	95	91	88	85	80	78	75	70	68	67	61	60	58
2	92	85	79	74	86	80	74	70	70	66	63	62	59	56	54	52	50
3	84	75	67	62	79	71	64	59	62	57	53	55	51	48	48	45	42
4	77	66	58	52	72	63	56	50	56	50	46	49	45	41	43	40	37
5	71	59	51	45	67	56	49	43	50	44	39	44	40	36	39	35	32
6	66	53	45	39	61	51	43	38	45	39	35	40	35	32	35	32	28
7	61	48	40	35	57	46	39	33	41	35	31	37	32	28	32	28	25
8	57	44	36	31	53	42	35	30	38	32	27	34	29	25	30	26	23
9	53	40	33	28	49	38	31	27	35	29	25	31	26	23	28	24	21
10	49	37	30	25	46	35	29	24	32	26	22	29	24	21	26	22	19

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	2.5
10°-20°	361.5	7.0
20°-30°	524.1	10.2
30°-40°	597.1	11.6
40°-50°	582.0	11.3
50°-60°	489.8	9.5
60°-70°	343.3	6.7
70°-80°	176.0	3.4
80°-90°	44.8	0.9
90°-100°	20.8	0.4
100°-110°	138.5	2.7
110°-120°	249.4	4.9
120°-130°	320.1	6.2
130°-140°	344.3	6.7
140°-150°	323.1	6.3
150°-160°	261.4	5.1
160°-170°	169.1	3.3
170°-180°	58.3	1.1
0°-30°	1014.9	19.8
0°-40°	1612.1	31.4
0°-60°	2683.9	52.3
0°-90°	3247.9	63.3
90°-120°	408.8	8.0
90°-150°	1396.4	27.2
90°-180°	1885.0	36.7
0°-180°	5133.0	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°	0	4	7	10	11	5
95°	26	25	7	10	10	32
105°	134	136	136	136	135	142
115°	251	253	254	252	249	249
125°	357	360	360	358	357	319
135°	445	448	447	446	444	343
145°	516	517	517	518	515	323
155°	569	566	567	568	564	262
165°	600	597	598	600	597	170
175°	614	611	611	615	611	58
180°	614	614	614	614	614	

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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°	0.5	4.1	7.3	9.6	10.9
92.5°	8.6	4.5	7.3	9.6	10.0
95°	25.9	24.6	7.3	9.6	9.6
97.5°	48.7	51.4	8.2	9.1	9.6
100°	76.0	77.3	79.2	11.4	9.6
102.5°	103.7	105.5	106.4	107.4	69.1
105°	133.7	135.6	135.6	135.6	135.1
107.5°	164.7	164.7	165.6	166.0	164.2
110°	194.7	194.7	195.6	194.2	194.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.9	224.3	224.7	222.9	222.0
115°	251.1	253.4	253.8	252.0	249.3
117.5°	280.7	280.7	282.5	279.8	278.9
120°	308.0	307.5	308.9	308.0	305.7
122.5°	332.1	334.4	334.8	333.9	331.2
125°	357.1	360.3	360.3	358.5	357.1
127.5°	381.2	383.5	383.0	382.1	378.5
130°	403.1	405.3	405.8	404.4	402.1
132.5°	424.9	427.6	426.3	426.3	424.0
135°	445.4	448.1	447.2	446.3	443.5
137.5°	464.5	467.2	466.3	466.3	464.0
140°	483.1	484.0	483.6	484.5	481.8
142.5°	499.9	500.4	501.3	501.3	498.6
145°	516.3	517.2	517.2	517.7	515.0
147.5°	530.9	530.9	531.3	531.8	528.6
150°	544.5	543.6	544.5	545.4	541.8
152.5°	557.7	555.4	556.4	557.3	554.1
155°	568.6	565.9	566.8	568.2	564.5
157.5°	577.3	575.9	575.9	577.3	573.6
160°	586.4	583.7	584.1	585.9	582.3
162.5°	593.7	590.9	591.4	594.1	590.0
165°	600.0	597.3	597.8	600.5	596.8
167.5°	605.0	602.3	602.8	605.9	601.9
170°	609.1	605.9	606.4	610.0	605.9
172.5°	611.9	608.7	609.6	612.8	608.7
175°	613.7	610.9	611.4	615.0	610.9
177.5°	615.0	612.3	612.8	616.0	612.3
180°	613.7	613.7	613.7	613.7	613.7

(END OF REPORT)