

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: P1004604

Luminaire Tested: S125DR-B375DB40-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004604
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DR-B375DB40-4F0-XX-W2A-D
Description: Define 5 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

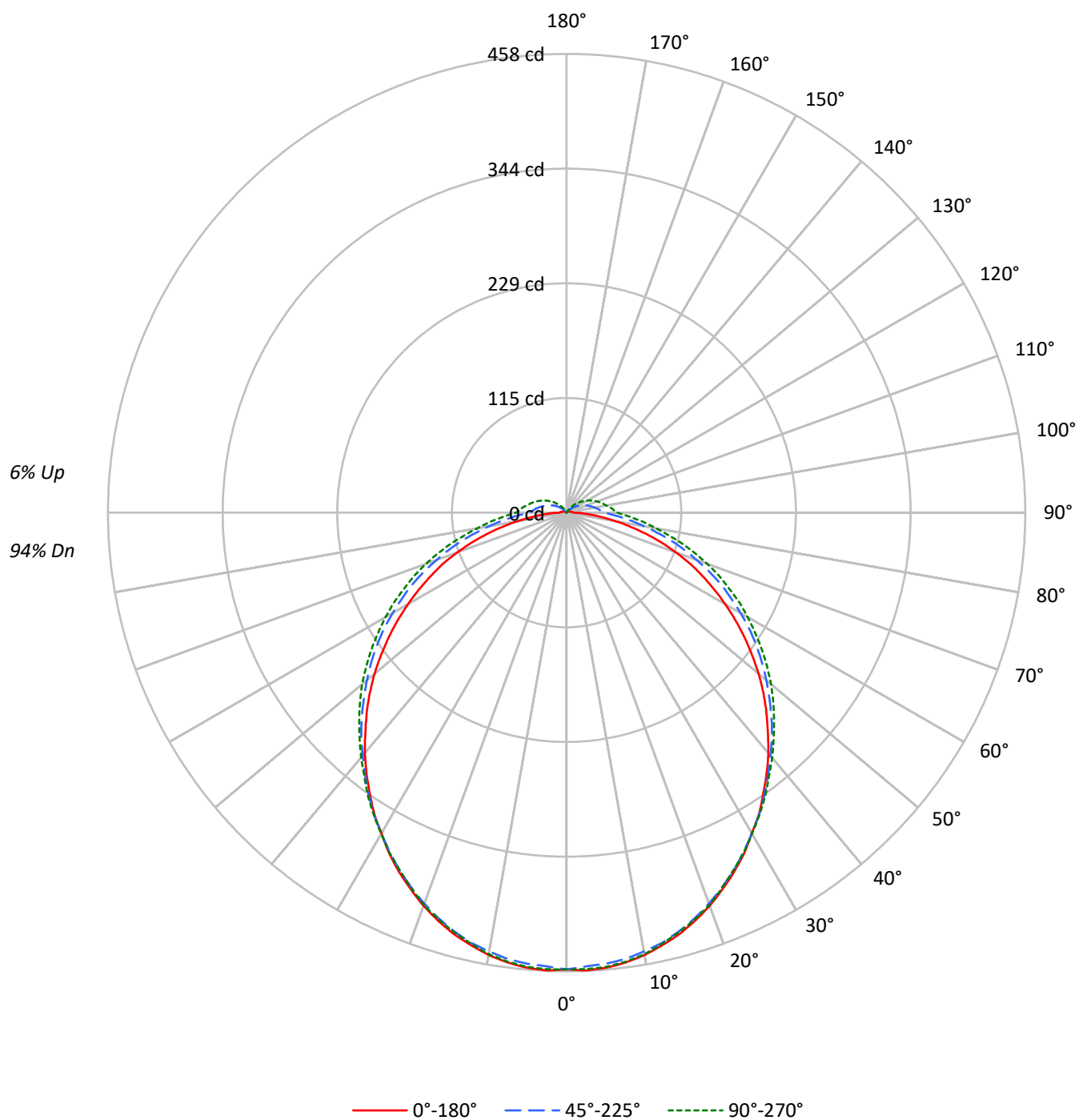
Lumens per Lamp: N/A
Luminaire Lumens: 1413.0 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
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
RCR																	
0	118	118	118	118	114	114	114	114	108	108	108		102	102	102		96
1	106	101	96	92	103	98	94	90	93	89	86		88	85	82		83
2	96	88	80	74	93	85	78	73	81	75	70		76	72	68		72
3	88	77	68	61	84	75	67	60	71	64	59		67	61	57		64
4	80	68	59	52	77	66	58	51	63	55	50		60	53	48		57
5	74	60	51	44	71	59	50	44	56	49	43		53	47	42		51
6	68	54	45	39	66	53	45	38	51	43	38		48	42	37		46
7	63	49	40	34	61	48	40	34	46	39	33		44	37	33		42
8	59	45	36	30	57	44	36	30	42	35	30		40	34	29		39
9	55	41	33	27	53	40	33	27	39	32	27		37	31	26		36
10	51	38	30	25	50	37	30	25	36	29	24		35	28	24		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2922	2922	2922
5°	2933	2908	2928
10°	2918	2894	2912
15°	2889	2871	2877
20°	2848	2832	2842
25°	2798	2788	2785
30°	2736	2736	2740
35°	2679	2693	2704
40°	2622	2648	2671
45°	2557	2621	2654
50°	2496	2595	2656
55°	2423	2583	2657
60°	2344	2573	2676
65°	2265	2583	2712
70°	2179	2589	2799
75°	2037	2679	2956
80°	1863	2922	3350
85°	1808	4043	5028

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 8608 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	3.1
10°-20°	122.5	8.7
20°-30°	182.2	12.9
30°-40°	215.8	15.3
40°-50°	223.1	15.8
50°-60°	205.5	14.5
60°-70°	166.1	11.8
70°-80°	111.2	7.9
80°-90°	57.5	4.1
90°-100°	32.4	2.3
100°-110°	23.9	1.7
110°-120°	16.0	1.1
120°-130°	9.0	0.6
130°-140°	4.0	0.3
140°-150°	0.8	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	347.9	24.6
0°-40°	563.7	39.9
0°-60°	992.3	70.2
0°-90°	1327.0	93.9
90°-120°	72.2	5.1
90°-150°	86.0	6.1
90°-180°	86.0	6.1
0°-180°	1413.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	456	456	456	456	456	
5°	456	455	452	456	455	43
15°	436	436	433	436	434	123
25°	396	397	394	396	394	182
35°	342	346	344	346	346	214
45°	282	287	289	292	293	218
55°	217	224	231	236	238	194
65°	149	160	170	177	179	148
75°	82	94	108	117	119	87
85°	25	39	55	65	68	26
90°	7	22	37	47	50	5
95°	6	17	33	42	46	5
105°	4	11	25	34	37	4
115°	3	6	17	26	28	3
125°	2	1	10	17	20	1
135°	1	0	4	9	12	1
145°	0	0	0	2	4	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	456.1	456.1	456.1	456.1	456.1
2.5°	457.5	456.6	453.4	456.6	456.1
5°	456.1	455.2	452.1	455.7	455.2
7.5°	453.0	452.5	449.4	452.5	452.1
10°	448.5	448.5	444.9	448.1	447.6
12.5°	442.3	442.7	440.0	442.3	440.9
15°	435.6	436.0	432.9	435.6	433.8
17.5°	427.1	428.0	424.8	427.1	425.7
20°	417.7	418.6	415.4	416.8	416.8
22.5°	406.9	408.7	405.1	406.9	405.6
25°	395.8	397.1	394.4	396.2	394.0
27.5°	383.7	385.5	382.3	383.7	382.8
30°	369.8	372.5	369.8	370.7	370.3
32.5°	357.3	359.5	357.7	358.6	358.2
35°	342.5	345.7	344.3	345.7	345.7
37.5°	328.2	330.9	330.5	332.3	331.8
40°	313.5	317.1	316.6	318.4	319.3
42.5°	297.4	302.3	303.6	305.9	305.9
45°	282.2	287.1	289.3	292.5	292.9
47.5°	266.5	271.0	274.6	279.0	279.9
50°	250.4	255.3	260.3	265.2	266.5
52.5°	233.4	239.7	246.0	251.3	252.2
55°	216.9	224.0	231.2	236.1	237.9
57.5°	199.9	208.4	216.4	221.8	223.1
60°	182.9	191.8	200.8	207.5	208.8
62.5°	166.4	175.3	185.1	192.7	194.5
65°	149.4	159.6	170.4	177.1	178.9
67.5°	133.7	143.5	154.3	162.3	164.6
70°	116.3	126.6	138.2	146.7	149.4
72.5°	99.3	110.0	123.0	132.4	134.2
75°	82.3	93.9	108.2	117.2	119.4
77.5°	65.7	79.2	92.6	102.4	104.2
80°	50.5	63.9	79.2	89.0	90.8
82.5°	36.7	51.0	66.6	76.0	79.6
85°	24.6	39.4	55.0	64.8	68.4
87.5°	15.7	30.0	45.2	55.5	58.6
90°	7.2	21.5	36.7	47.0	50.1
92.5°	6.3	19.2	34.9	44.7	47.8
95°	5.8	17.4	32.6	42.5	45.6
97.5°	5.4	16.1	30.9	40.2	43.4
100°	4.9	14.3	28.6	38.0	40.7
102.5°	4.5	13.0	26.8	35.8	38.5
105°	4.0	11.2	24.6	33.5	36.7
107.5°	3.6	9.8	22.8	31.7	34.4
110°	3.1	8.5	21.0	29.5	32.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.1	7.2	19.2	27.3	30.4
115°	2.7	5.8	17.4	25.5	28.2
117.5°	2.2	4.5	15.7	23.3	26.4
120°	2.2	3.6	13.9	21.5	24.1
122.5°	1.8	2.2	12.1	19.2	21.9
125°	1.8	1.3	10.3	17.4	19.7
127.5°	1.3	0.9	8.5	15.2	17.9
130°	1.3	0.9	7.2	13.4	15.7
132.5°	0.9	0.9	5.4	11.6	13.4
135°	0.9	0.4	3.6	9.4	11.6
137.5°	0.9	0.4	2.2	7.6	9.4
140°	0.4	0.4	0.9	5.8	7.6
142.5°	0.4	0.0	0.0	4.0	5.8
145°	0.4	0.0	0.0	2.2	4.0
147.5°	0.0	0.0	0.0	0.9	1.8
150°	0.0	0.0	0.0	0.0	0.4
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)