

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: P1031932

Luminaire Tested: S123DIW-B775D460UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031932
REPORT IS A COMBINATION OF REPORTS P992070 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D460UB30-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

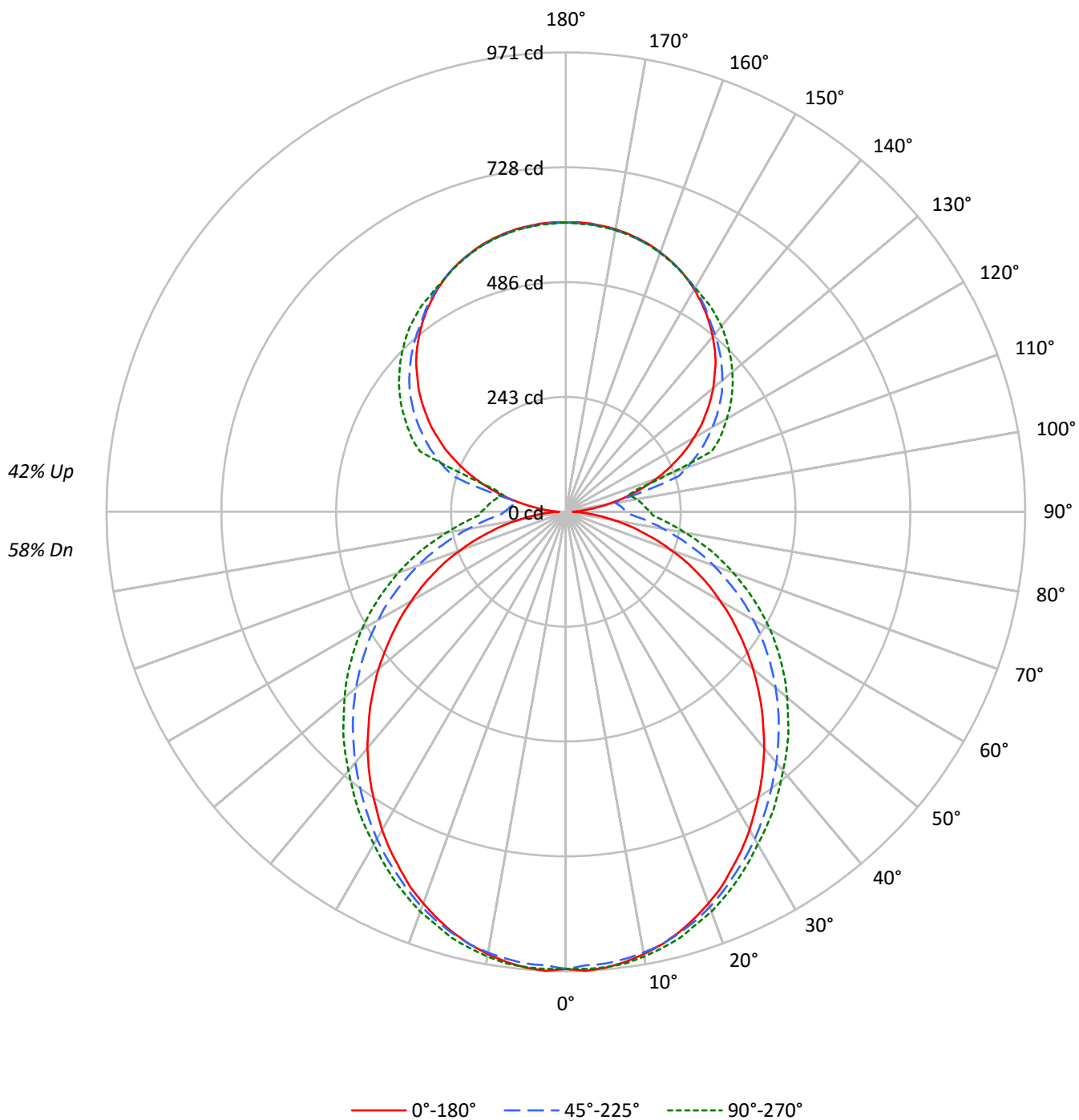
Lumens per Lamp: N/A
Luminaire Lumens: 5112.0 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64
1	98	93	89	85	91	87	83	80	75	72	70	64	62	60	54	53	51
2	89	81	74	69	83	76	70	65	65	61	57	56	52	49	47	45	42
3	81	71	63	57	75	66	59	53	57	52	47	49	45	41	41	38	35
4	74	62	54	48	68	58	51	45	51	45	40	43	39	35	37	33	30
5	68	56	47	41	63	52	44	38	45	39	34	39	34	30	33	29	26
6	62	50	41	35	58	47	39	33	41	34	30	35	30	26	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	27	23	20
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10399	10399	10399
5°	10428	10094	10086
10°	10330	9820	9746
15°	10194	9519	9385
20°	9999	9182	8997
25°	9760	8803	8596
30°	9516	8460	8193
35°	9243	8101	7865
40°	8980	7771	7518
45°	8691	7453	7232
50°	8404	7136	6922
55°	8085	6814	6637
60°	7775	6482	6345
65°	7455	6129	6002
70°	6973	5733	5650
75°	6364	5281	5285
80°	5657	4825	4870
85°	4956	4456	4573

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8691 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	1.8
10°-20°	261.3	5.1
20°-30°	390.7	7.6
30°-40°	466.5	9.1
40°-50°	488.1	9.5
50°-60°	458.0	9.0
60°-70°	382.6	7.5
70°-80°	273.6	5.4
80°-90°	164.0	3.2
90°-100°	123.8	2.4
100°-110°	179.4	3.5
110°-120°	305.6	6.0
120°-130°	352.9	6.9
130°-140°	359.3	7.0
140°-150°	326.6	6.4
150°-160°	261.3	5.1
160°-170°	168.6	3.3
170°-180°	58.1	1.1
0°-30°	743.6	14.5
0°-40°	1210.1	23.7
0°-60°	2156.2	42.2
0°-90°	2976.4	58.2
90°-120°	608.9	11.9
90°-150°	1647.6	32.2
90°-180°	2136.0	41.8
0°-180°	5112.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	967	965	959	967	966	92
15°	921	924	923	934	932	259
25°	831	842	845	859	859	383
35°	716	732	746	762	766	448
45°	585	610	637	657	665	451
55°	446	481	519	547	556	400
65°	308	349	396	427	438	305
75°	167	217	269	304	317	179
85°	52	104	160	196	206	53
90°	14	70	130	167	179	11
95°	39	62	118	154	165	42
105°	144	174	178	128	138	152
115°	259	274	316	346	357	256
125°	361	365	397	420	428	323
135°	448	449	463	483	487	345
145°	515	517	518	528	532	322
155°	566	566	566	568	566	261
165°	597	596	596	599	596	169
175°	611	609	610	613	609	58
180°	611	611	611	611	611	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	966.1	966.1	966.1	966.1	966.1
2.5°	971.4	968.2	959.8	968.2	967.2
5°	967.2	965.1	958.8	967.2	966.1
7.5°	959.8	959.8	953.5	964.0	963.0
10°	949.3	951.4	946.1	956.7	954.6
12.5°	936.7	939.8	936.7	946.1	944.0
15°	920.9	924.0	923.0	933.5	932.5
17.5°	901.9	908.3	907.2	916.7	914.6
20°	880.9	887.2	889.3	898.8	899.8
22.5°	858.8	865.1	868.3	880.9	879.8
25°	831.4	842.0	845.1	858.8	858.8
27.5°	805.1	816.7	823.0	834.6	835.6
30°	776.7	790.4	798.8	811.4	811.4
32.5°	745.1	760.9	772.5	786.2	789.3
35°	715.7	732.5	746.2	762.0	766.2
37.5°	684.1	703.0	718.8	736.7	739.9
40°	652.5	671.5	692.5	710.4	714.6
42.5°	617.8	642.0	664.1	684.1	690.4
45°	585.2	610.4	636.7	656.7	665.1
47.5°	550.4	578.8	608.3	630.4	636.7
50°	516.8	546.2	578.8	603.1	610.4
52.5°	481.0	512.5	549.4	574.6	584.1
55°	446.2	481.0	518.9	547.3	555.7
57.5°	412.6	448.3	489.4	517.8	527.3
60°	376.8	414.7	457.8	487.3	498.9
62.5°	343.1	382.0	428.3	457.8	468.3
65°	308.4	349.4	395.7	427.3	437.8
67.5°	273.6	316.8	363.1	397.8	406.2
70°	236.8	282.1	332.6	366.3	376.8
72.5°	203.1	248.4	301.0	335.7	346.3
75°	167.3	216.8	269.4	304.2	316.8
77.5°	136.8	186.3	238.9	275.7	285.2
80°	104.2	155.8	210.5	246.3	256.8
82.5°	75.8	128.4	184.2	220.0	230.5
85°	51.6	104.2	160.0	195.8	206.3
87.5°	31.6	84.2	137.9	173.7	184.2
90°	14.2	70.3	129.8	167.4	178.8
92.5°	23.0	65.6	122.3	160.2	170.1
95°	39.3	61.7	118.3	154.1	164.6
97.5°	60.9	86.1	112.4	147.7	158.6
100°	86.3	129.0	106.6	140.7	151.7
102.5°	115.1	150.5	118.8	133.3	144.7
105°	143.8	174.0	178.4	127.5	137.9
107.5°	173.2	199.4	249.3	207.7	157.7
110°	202.5	225.1	272.2	284.6	228.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	231.6	249.5	294.5	324.9	333.4
115°	259.2	274.5	316.5	346.3	356.6
117.5°	287.4	298.9	337.0	365.8	374.7
120°	312.2	321.5	357.6	385.4	392.8
122.5°	338.5	343.8	378.2	403.7	411.5
125°	361.1	364.7	397.1	420.1	428.3
127.5°	384.7	387.3	415.8	438.3	444.7
130°	406.5	409.1	432.0	453.8	459.2
132.5°	426.3	430.0	447.1	467.8	473.9
135°	447.7	449.4	462.7	483.1	486.9
137.5°	465.8	468.5	476.7	495.9	500.1
140°	483.0	485.7	490.2	507.8	512.2
142.5°	499.8	501.4	502.8	517.9	521.7
145°	515.3	517.3	518.2	527.6	531.8
147.5°	529.1	531.4	532.3	536.4	538.4
150°	542.8	544.1	545.0	546.0	546.7
152.5°	555.0	555.5	555.9	557.8	555.5
155°	566.4	565.5	565.9	568.2	565.5
157.5°	575.5	575.5	575.0	577.7	574.1
160°	583.7	583.2	582.7	585.5	582.3
162.5°	591.4	590.0	589.6	592.7	590.0
165°	597.3	595.9	595.5	599.1	595.9
167.5°	602.3	600.5	600.5	604.1	600.5
170°	606.4	604.5	604.5	608.2	604.5
172.5°	609.1	606.8	607.3	610.9	606.8
175°	611.4	609.1	609.5	612.7	609.1
177.5°	612.3	610.0	610.5	614.1	609.5
180°	611.4	611.4	611.4	611.4	611.4

(END OF REPORT)