

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: P1031933

Luminaire Tested: S123DIW-B775D460UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031933
REPORT IS A COMBINATION OF REPORTS P992071 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-D1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

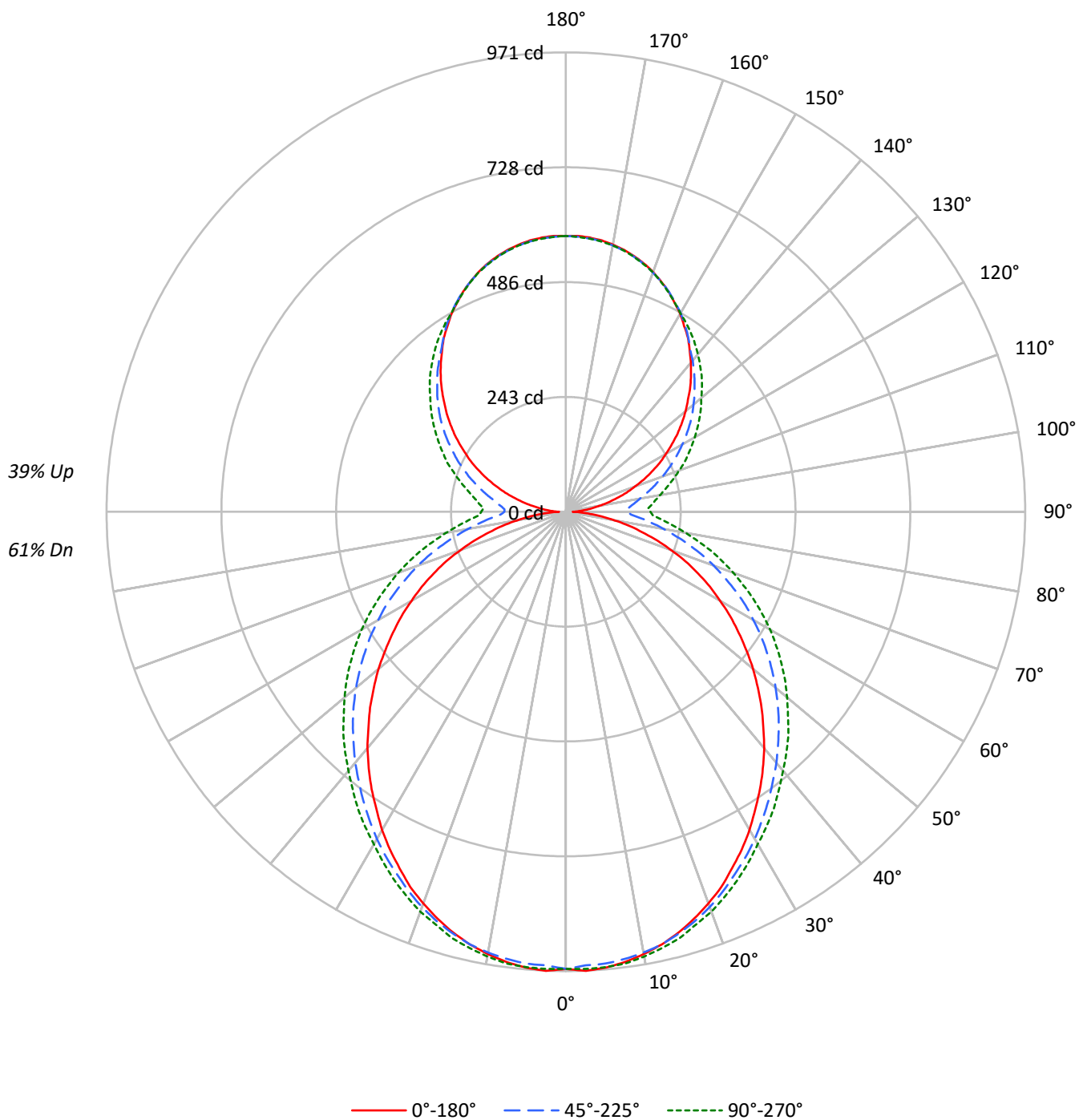
Lumens per Lamp: N/A
Luminaire Lumens: 4864.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	90	90	90	77	77	77	66	66	66
1	99	94	90	86	92	88	84	81	77	74	71	66	64	62	57	55	54
2	90	81	75	69	83	76	70	65	66	62	58	57	54	51	49	46	44
3	81	71	63	57	76	67	60	54	58	53	48	50	46	42	43	40	37
4	74	63	54	48	69	59	51	45	52	45	41	45	40	36	38	35	32
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	34	30	27
6	63	50	41	35	58	47	39	34	41	35	30	36	31	27	31	27	24
7	58	45	37	31	54	43	35	29	38	31	27	33	28	24	28	24	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	32	26	21	29	23	19	26	21	17	22	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	1.9
10°-20°	261.3	5.4
20°-30°	390.7	8.0
30°-40°	466.5	9.6
40°-50°	488.1	10.0
50°-60°	458.0	9.4
60°-70°	382.6	7.9
70°-80°	273.6	5.6
80°-90°	164.0	3.4
90°-100°	139.8	2.9
100°-110°	188.8	3.9
110°-120°	243.6	5.0
120°-130°	283.1	5.8
130°-140°	298.9	6.1
140°-150°	283.9	5.8
150°-160°	236.8	4.9
160°-170°	157.6	3.2
170°-180°	55.2	1.1
0°-30°	743.6	15.3
0°-40°	1210.1	24.9
0°-60°	2156.2	44.3
0°-90°	2976.4	61.2
90°-120°	572.2	11.8
90°-150°	1438.1	29.6
90°-180°	1888.0	38.8
0°-180°	4864.0	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	168	179	12
95°	39	83	138	172	183	39
105°	112	138	187	216	227	119
115°	200	214	251	277	285	198
125°	288	290	319	339	345	257
135°	372	374	385	402	406	286
145°	450	449	451	459	461	281
155°	514	514	514	516	513	236
165°	559	558	558	561	558	158
175°	582	580	580	583	580	55
180°	583	583	583	583	583	

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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	129.9	167.5	178.9
92.5°	26.3	74.4	129.7	165.8	174.4
95°	38.6	82.8	138.1	172.5	183.0
97.5°	54.9	95.1	147.4	181.3	191.3
100°	71.8	108.2	158.9	190.8	202.2
102.5°	91.3	122.2	172.7	203.6	213.6
105°	111.5	137.7	187.0	216.5	226.9
107.5°	134.3	156.8	201.8	231.6	240.6
110°	155.2	175.1	218.1	247.2	254.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.1	193.2	233.2	261.9	271.3
115°	200.0	214.0	250.9	276.6	284.6
117.5°	223.3	232.2	267.1	292.3	299.3
120°	243.8	251.8	284.2	308.0	314.5
122.5°	266.2	270.2	301.8	323.7	329.7
125°	288.1	289.5	319.1	339.4	344.8
127.5°	309.2	310.8	336.2	354.6	360.0
130°	330.3	332.8	352.6	370.7	373.8
132.5°	350.2	353.9	368.8	385.4	390.5
135°	371.8	373.5	384.6	401.7	406.0
137.5°	391.5	392.8	401.4	416.0	419.9
140°	411.1	413.4	416.9	432.3	434.4
142.5°	429.9	431.1	432.0	445.2	448.1
145°	449.6	449.4	450.8	458.7	461.1
147.5°	465.4	467.2	468.6	471.8	473.3
150°	483.3	484.2	485.1	485.1	484.5
152.5°	497.9	499.3	499.8	500.7	498.4
155°	513.5	513.5	514.0	515.8	512.6
157.5°	526.8	526.3	526.8	528.6	525.9
160°	539.2	538.2	538.2	540.5	538.7
162.5°	550.2	548.8	549.2	551.5	548.3
165°	559.3	557.9	557.9	560.7	557.5
167.5°	567.1	565.3	565.7	568.5	565.7
170°	573.5	571.7	571.7	574.9	571.7
172.5°	578.6	576.7	576.7	579.5	576.3
175°	581.8	579.9	579.9	582.7	579.5
177.5°	583.6	581.8	581.8	584.5	581.3
180°	583.1	583.1	583.1	583.1	583.1

(END OF REPORT)