

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: P1031506

Luminaire Tested: S123DIW-B1165D460UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031506
REPORT IS A COMBINATION OF REPORTS P991089 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D460UB35-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

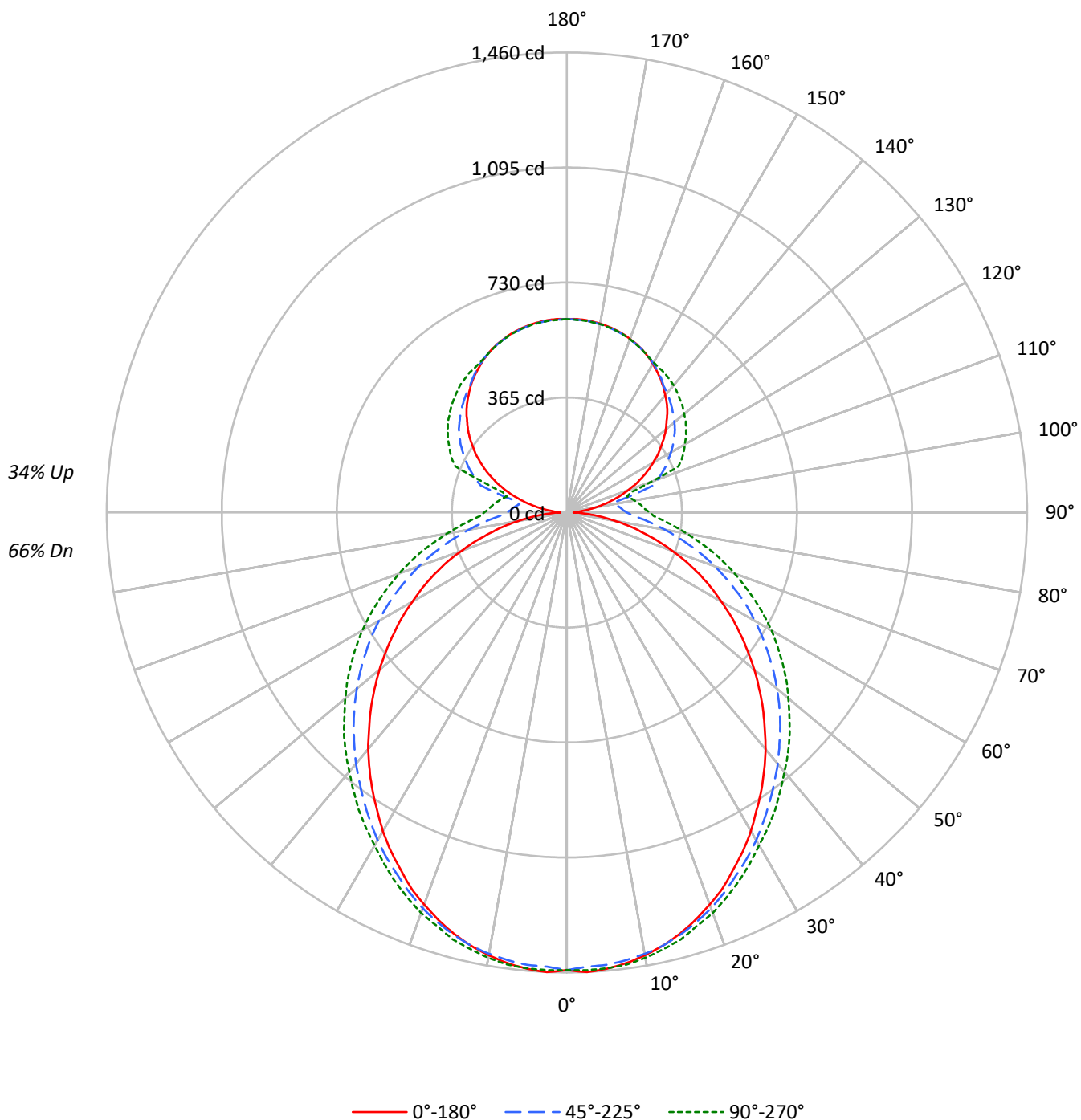
Lumens per Lamp: N/A
Luminaire Lumens: 6754.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71
1	100	95	90	86	94	89	85	82	79	76	73	69	67	65	61	59	57
2	91	82	75	69	85	77	71	66	68	64	59	60	56	53	53	50	47
3	82	72	64	57	77	68	60	55	60	54	49	53	48	44	46	43	40
4	75	63	55	48	70	60	52	46	53	47	42	47	42	38	41	37	34
5	69	56	48	41	64	53	45	39	47	41	36	42	37	33	37	33	29
6	63	51	42	36	59	48	40	34	43	36	31	38	32	28	33	29	26
7	59	46	37	31	55	43	35	30	39	32	27	34	29	25	30	26	23
8	55	41	33	28	51	39	32	27	35	29	24	31	26	22	28	24	20
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18
10	48	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15632	15632	15632
5°	15675	15174	15162
10°	15529	14763	14650
15°	15323	14310	14108
20°	15032	13803	13526
25°	14672	13234	12922
30°	14306	12718	12317
35°	13893	12177	11822
40°	13500	11682	11301
45°	13063	11204	10872
50°	12632	10728	10406
55°	12154	10242	9976
60°	11687	9744	9537
65°	11204	9214	9022
70°	10484	8617	8492
75°	9567	7939	7945
80°	8502	7252	7320
85°	7444	6697	6873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13063 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	2.0
10°-20°	392.8	5.8
20°-30°	587.3	8.7
30°-40°	701.2	10.4
40°-50°	733.7	10.9
50°-60°	688.5	10.2
60°-70°	575.1	8.5
70°-80°	411.2	6.1
80°-90°	245.9	3.6
90°-100°	175.4	2.6
100°-110°	217.7	3.2
110°-120°	332.0	4.9
120°-130°	368.7	5.5
130°-140°	367.2	5.4
140°-150°	329.3	4.9
150°-160°	262.4	3.9
160°-170°	169.3	2.5
170°-180°	58.4	0.9
0°-30°	1117.9	16.6
0°-40°	1819.1	26.9
0°-60°	3241.3	48.0
0°-90°	4473.6	66.2
90°-120°	725.1	10.7
90°-150°	1790.4	26.5
90°-180°	2280.0	33.8
0°-180°	6754.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1454	1451	1441	1454	1452	138
15°	1384	1389	1388	1403	1402	390
25°	1250	1266	1270	1291	1291	576
35°	1076	1101	1122	1145	1152	673
45°	880	918	957	987	1000	678
55°	671	723	780	823	835	601
65°	464	525	595	642	658	458
75°	252	326	405	457	476	269
85°	78	157	240	294	310	80
90°	21	103	190	245	262	16
95°	45	88	171	223	239	47
105°	149	192	219	182	197	157
115°	263	285	346	388	403	260
125°	364	368	416	450	462	326
135°	451	452	471	501	507	347
145°	518	520	520	534	540	324
155°	569	568	568	571	568	262
165°	600	598	598	602	598	169
175°	614	612	612	615	612	58
180°	614	614	614	614	614	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1452.3	1452.3	1452.3	1452.3	1452.3
2.5°	1460.3	1455.5	1442.8	1455.5	1453.9
5°	1453.9	1450.8	1441.3	1453.9	1452.3
7.5°	1442.8	1442.8	1433.4	1449.2	1447.6
10°	1427.0	1430.2	1422.3	1438.1	1434.9
12.5°	1408.0	1412.8	1408.0	1422.3	1419.1
15°	1384.3	1389.1	1387.5	1403.3	1401.7
17.5°	1355.8	1365.3	1363.7	1378.0	1374.8
20°	1324.2	1333.7	1336.8	1351.1	1352.7
22.5°	1291.0	1300.5	1305.2	1324.2	1322.6
25°	1249.8	1265.7	1270.4	1291.0	1291.0
27.5°	1210.3	1227.7	1237.2	1254.6	1256.2
30°	1167.6	1188.1	1200.8	1219.8	1219.8
32.5°	1120.1	1143.8	1161.2	1181.8	1186.6
35°	1075.8	1101.1	1121.7	1145.4	1151.7
37.5°	1028.3	1056.8	1080.6	1107.4	1112.2
40°	980.9	1009.4	1041.0	1067.9	1074.2
42.5°	928.7	965.1	998.3	1028.3	1037.8
45°	879.6	917.6	957.2	987.2	999.9
47.5°	827.4	870.1	914.4	947.7	957.2
50°	776.8	821.1	870.1	906.5	917.6
52.5°	723.0	770.5	825.8	863.8	878.0
55°	670.8	723.0	780.0	822.7	835.3
57.5°	620.2	674.0	735.7	778.4	792.6
60°	566.4	623.3	688.2	732.5	749.9
62.5°	515.8	574.3	643.9	688.2	704.0
65°	463.5	525.2	594.9	642.3	658.1
67.5°	411.3	476.2	545.8	598.0	610.7
70°	356.0	424.0	499.9	550.6	566.4
72.5°	305.3	373.4	452.5	504.7	520.5
75°	251.5	325.9	405.0	457.2	476.2
77.5°	205.7	280.0	359.1	414.5	428.7
80°	156.6	234.1	316.4	370.2	386.0
82.5°	113.9	193.0	276.9	330.7	346.5
85°	77.5	156.6	240.5	294.3	310.1
87.5°	47.5	126.6	207.3	261.0	276.9
90°	21.1	103.1	189.7	245.4	262.1
92.5°	29.5	94.8	178.0	233.4	248.1
95°	45.2	88.2	170.7	223.0	238.8
97.5°	66.4	110.7	161.7	212.8	229.1
100°	91.3	151.1	152.7	202.2	218.5
102.5°	119.9	170.1	161.9	191.1	207.9
105°	148.6	191.6	218.6	182.2	197.3
107.5°	177.6	214.9	286.6	259.1	213.5
110°	206.6	238.7	307.0	333.1	280.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	235.8	261.0	326.3	369.9	383.3
115°	262.9	284.6	345.6	388.2	402.7
117.5°	291.2	307.1	363.1	404.7	417.8
120°	315.6	327.6	381.1	421.2	432.3
122.5°	342.0	348.4	399.2	436.3	447.9
125°	364.1	367.8	415.5	449.6	461.6
127.5°	387.9	390.0	431.8	464.9	475.0
130°	409.8	411.9	445.3	477.3	485.8
132.5°	429.2	432.9	458.0	488.3	497.9
135°	450.7	451.8	471.0	500.9	507.4
137.5°	468.9	471.0	483.0	510.6	517.6
140°	485.6	488.3	494.4	520.0	527.0
142.5°	502.5	503.6	505.0	526.9	533.5
145°	518.0	519.6	520.5	534.1	540.4
147.5°	531.4	533.7	534.6	540.2	544.3
150°	545.1	546.5	547.4	548.3	550.1
152.5°	557.4	557.9	558.3	560.2	557.9
155°	568.8	567.9	568.4	570.6	567.9
157.5°	577.9	577.9	577.5	580.2	576.6
160°	586.2	585.7	585.2	588.0	584.8
162.5°	593.9	592.5	592.1	595.3	592.5
165°	599.8	598.5	598.0	601.7	598.5
167.5°	604.9	603.0	603.0	606.7	603.0
170°	609.0	607.1	607.1	610.8	607.1
172.5°	611.7	609.4	609.9	613.5	609.4
175°	614.0	611.7	612.2	615.3	611.7
177.5°	614.9	612.6	613.1	616.7	612.2
180°	614.0	614.0	614.0	614.0	614.0

(END OF REPORT)