

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P574411

Luminaire Tested: **CCW-VA-AMBER-U-T3**

Issue Date: 10/14/2021

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

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Test Information

Test Method: LM-79-08
 Report Number: P574411
 Test Lab: INNOVATION CENTER(G1)
 Issue Date: 10/14/2021
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: INVUE
 Catalog Number: CCW-VA-AMBER-U-T3
 Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T3 DISTRIBUTION LENS
 Light Source: 1620 CCT, 0 CRI LEDS
 Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 849 lumens
 Efficiency: N/A
 Efficacy: 28.2 lumens/watt
 Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
 IES Classification: Type III - Short
 BUG Rating: B1 - U0 - G1

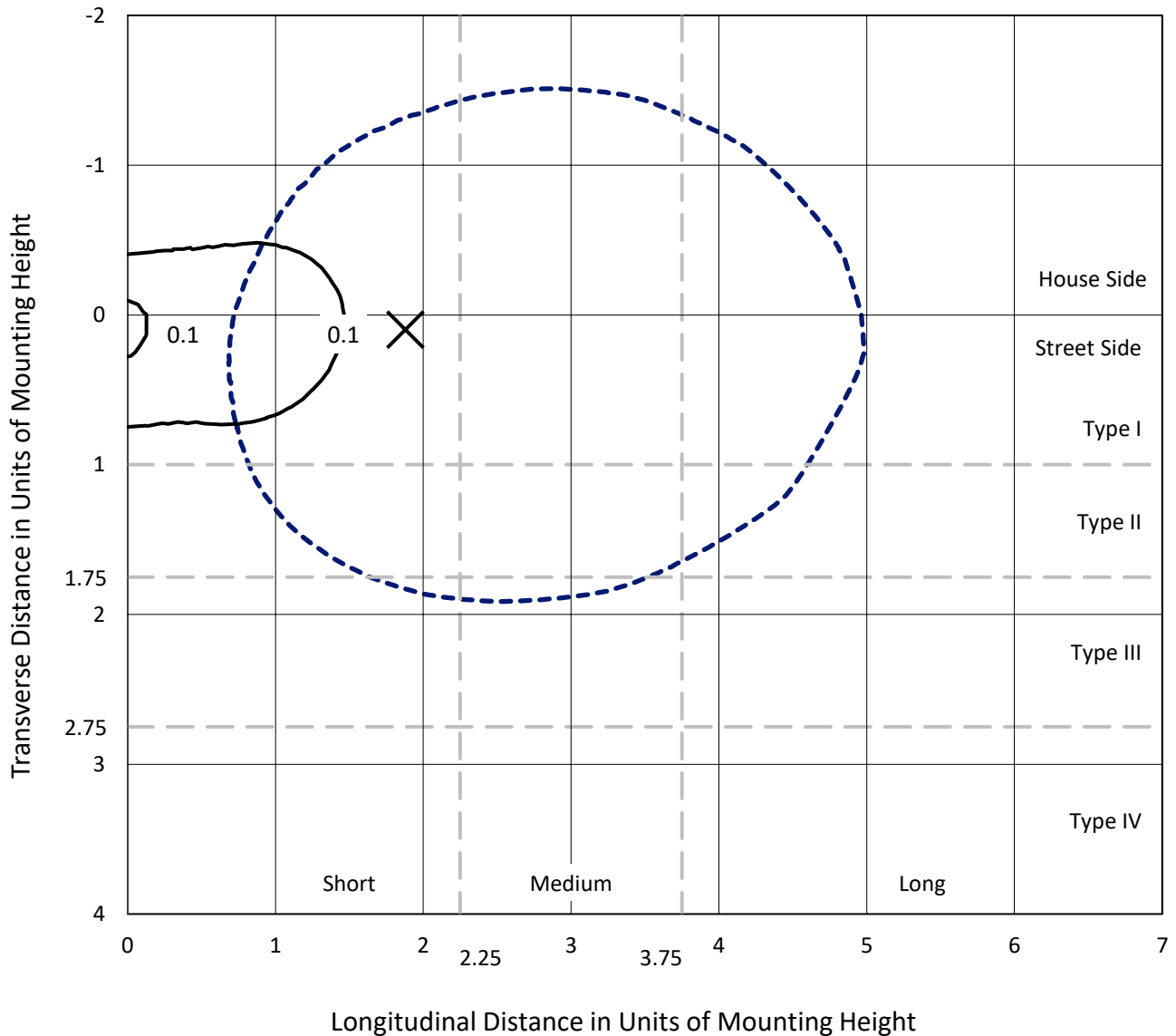
Input Watts (W): 30.1
 Input Voltage (V): 120
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021

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Iso-Footcandle Lines of Horizontal Illumination

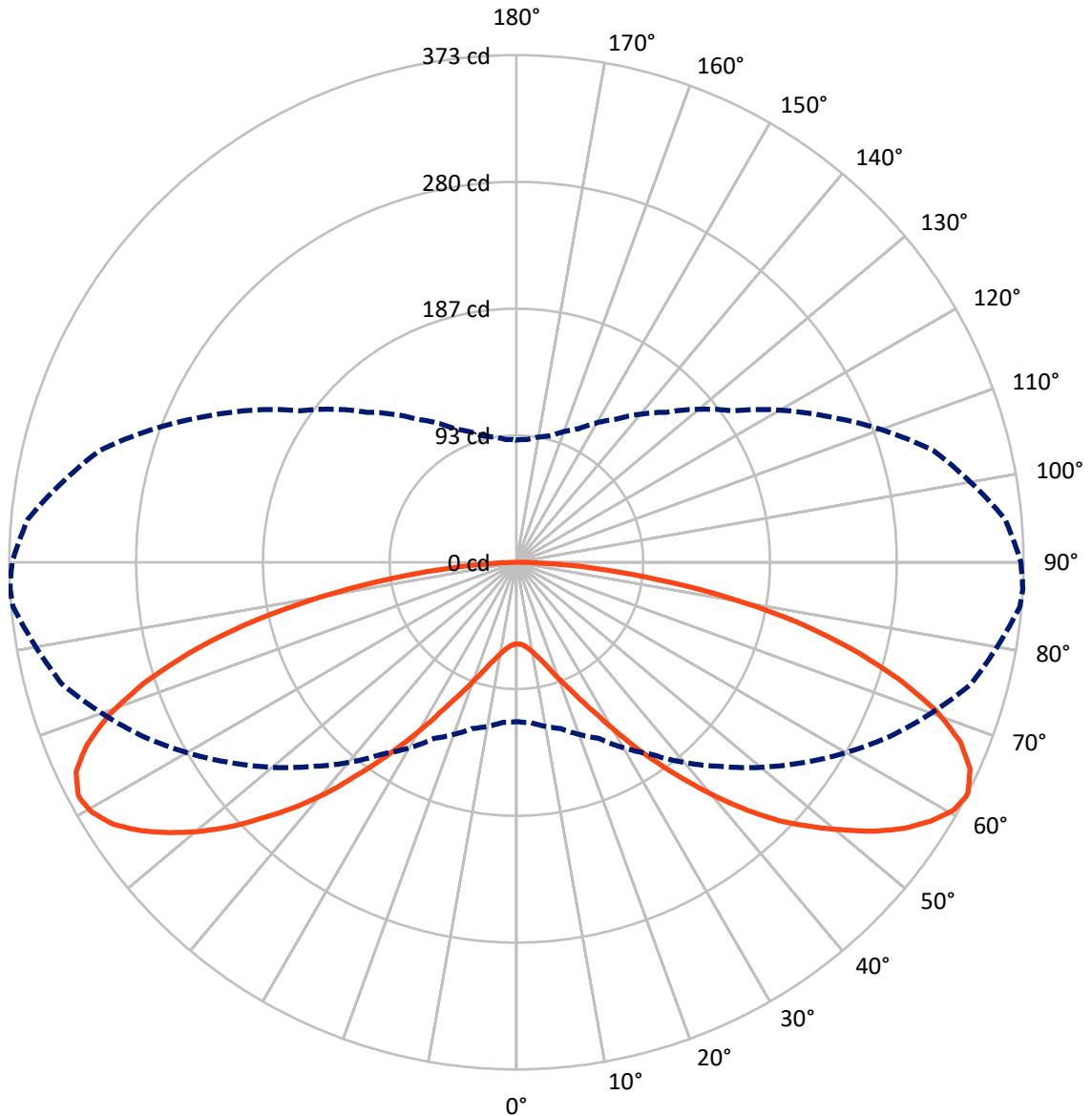
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 87-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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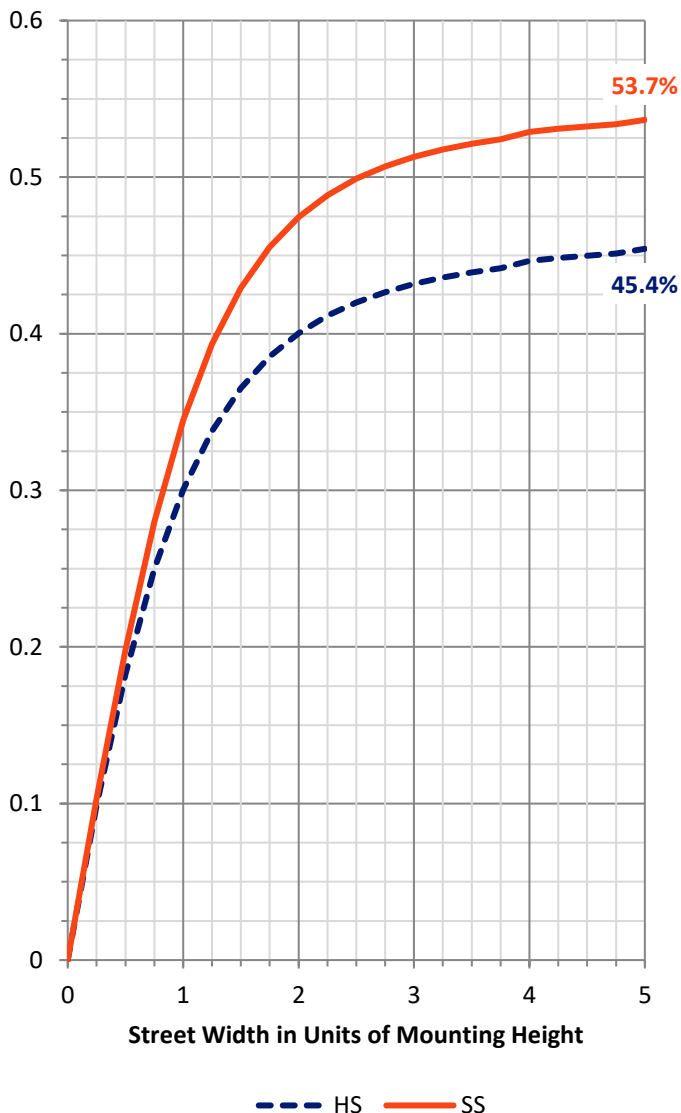
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	390.9	0.0	390.9
	% Fixture	46.0	0.0	46.0
Street Side	Lumens	458.1	0.0	458.1
	% Fixture	54.0	0.0	54.0
Total	Lumens	849.0	0.0	849.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.0	0.7
10°-20°	21.3	2.5
20°-30°	45.6	5.4
30°-40°	84.1	9.9
40°-50°	134.1	15.8
50°-60°	182.3	21.5
60°-70°	197.5	23.3
70°-80°	141.1	16.6
80°-90°	36.9	4.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	849.0	100.0
0°-180°	849.0	100.0

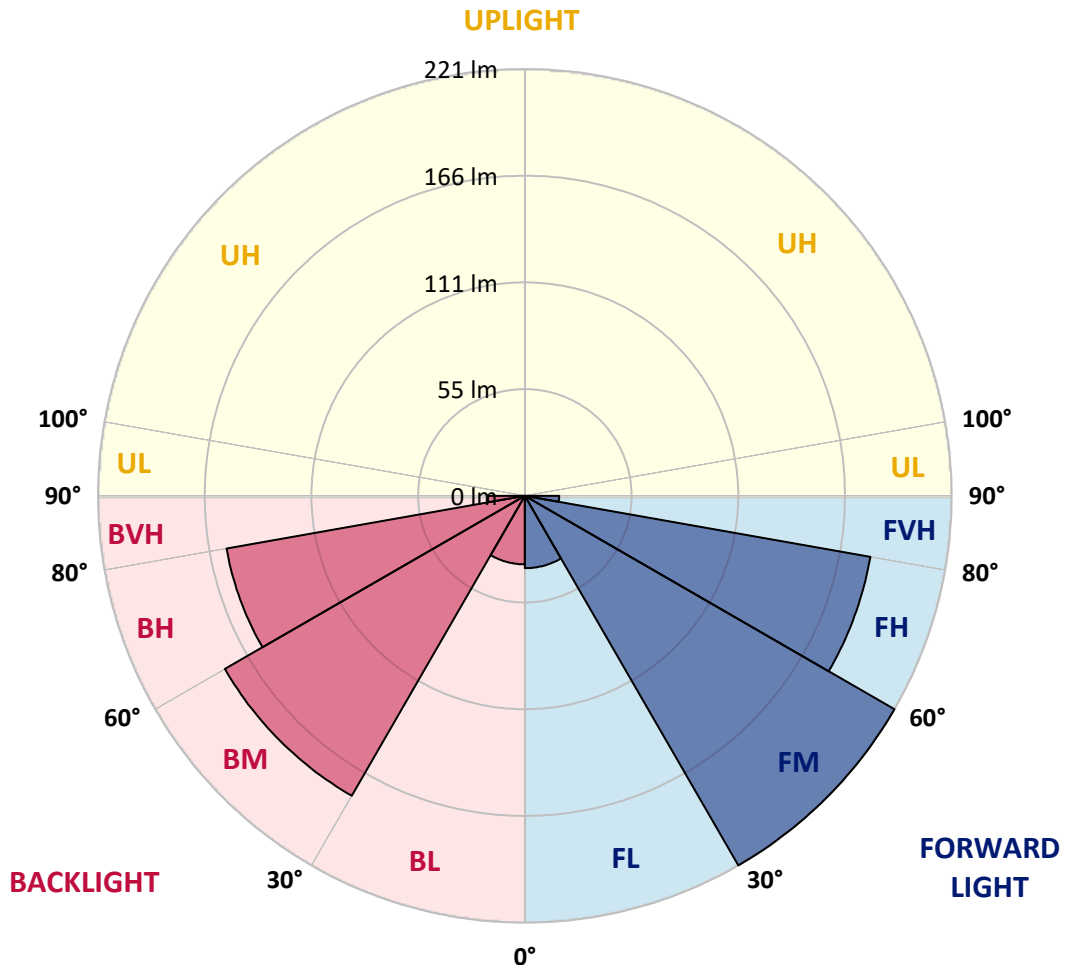


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	37.5	4.4			
FM (30°-60°)	221.1	26.0			
FH (60°-80°)	181.8	21.4			G0/660
FVH (80°-90°)	17.8	2.1			G1/100
BL (0°-30°)	35.5	4.2	B0/110		
BM (30°-60°)	179.4	21.1	B0/220		
BH (60°-80°)	156.9	18.5	B1/500		G1/500
BVH (80°-90°)	19.1	2.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	87°
0°	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
2.5°	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.4	60.4
5°	60.6	60.5	60.5	60.6	60.8	60.9	61.2	61.3	61.6	61.9	61.7
7.5°	61.9	61.9	61.9	62.0	62.4	62.7	63.1	63.5	63.9	64.2	64.1
10°	63.8	63.8	63.8	64.1	64.5	65.3	66.0	66.7	67.1	67.3	67.5
12.5°	65.8	65.8	66.1	66.7	67.5	68.6	69.8	70.8	71.5	71.7	71.8
15°	68.7	68.8	69.4	70.0	71.0	72.7	74.7	76.1	76.8	77.3	77.2
17.5°	73.1	72.9	73.4	74.6	75.8	78.2	80.6	83.0	84.3	84.3	84.3
20°	78.0	77.9	78.2	79.1	81.2	84.3	88.1	91.3	92.8	92.5	92.8
22.5°	83.5	83.5	83.8	84.6	86.6	91.2	96.5	101.1	103.2	102.5	102.2
25°	89.5	89.5	89.9	90.6	93.5	98.9	106.1	112.8	114.8	114.2	113.9
27.5°	96.5	96.0	96.8	97.4	101.0	108.3	117.6	126.1	130.6	128.2	127.4
30°	103.9	103.5	103.6	105.0	109.1	118.4	129.5	140.8	147.1	145.6	144.4
32.5°	110.3	110.6	111.0	113.3	118.0	129.2	142.1	157.0	164.1	163.7	163.4
35°	117.6	117.6	118.4	120.6	127.4	140.7	156.3	173.1	183.7	184.1	183.3
37.5°	123.3	123.3	124.6	127.4	135.5	151.2	170.4	190.2	203.0	205.2	204.5
40°	128.4	128.1	129.5	133.7	143.2	162.4	184.2	207.2	224.3	228.0	227.1
42.5°	131.4	131.7	133.6	138.9	150.6	172.3	197.8	223.2	243.2	249.5	249.5
45°	133.6	133.8	136.7	143.0	157.3	182.0	210.1	239.7	261.7	270.9	271.3
47.5°	134.5	135.0	138.5	146.2	162.9	190.9	222.0	254.4	278.2	291.3	290.4
50°	134.5	135.1	139.3	148.5	167.9	198.5	233.2	268.5	295.1	309.6	309.5
52.5°	133.7	134.4	139.6	150.3	172.2	205.7	243.2	280.6	311.2	328.4	328.9
55°	132.1	132.9	138.9	151.4	175.5	211.5	251.3	291.8	325.2	344.5	345.7
57.5°	128.8	129.6	136.4	150.4	176.7	214.5	257.2	299.7	336.6	359.1	359.4
60°	123.3	124.3	131.7	147.3	175.5	214.6	258.7	303.3	344.2	369.0	370.0
62°	117.3	118.4	126.7	142.9	172.3	212.4	257.0	303.2	346.3	371.9	373.1
62.5°	115.8	116.7	125.2	141.4	171.1	211.3	256.1	302.5	346.0	372.0	373.0
65°	106.5	107.5	116.1	133.2	163.6	204.6	249.1	296.5	341.1	366.5	366.8
67.5°	96.2	97.2	105.8	122.0	152.7	193.4	237.3	284.6	327.9	350.0	352.0
70°	84.3	85.7	93.6	109.6	138.5	177.2	218.7	265.7	307.0	325.7	327.7
72.5°	72.5	73.5	79.8	93.9	120.0	156.0	194.6	237.1	274.7	292.5	294.1
75°	58.8	59.7	65.8	77.5	99.4	130.0	166.4	203.5	237.7	253.7	255.0
77.5°	46.4	46.7	51.1	60.4	77.2	102.0	132.1	161.4	192.4	207.0	210.2
80°	32.7	34.1	37.1	43.5	54.2	73.1	94.8	119.9	141.7	158.0	159.0
82.5°	21.2	21.5	23.4	25.7	33.4	46.1	60.4	75.8	95.3	105.8	105.0
85°	11.1	11.1	11.8	12.4	15.1	20.7	29.2	40.0	51.3	59.3	58.2
87.5°	1.9	1.8	1.9	1.8	2.3	3.3	6.2	10.0	15.1	17.8	19.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
2.5°	60.4	60.4	60.5	60.8	60.8	60.9	61.1	61.1	61.2	61.3	61.3
5°	62.0	62.0	62.1	62.4	62.6	62.6	62.7	62.8	62.8	62.8	62.9
7.5°	64.2	64.3	64.5	64.6	64.7	64.7	65.2	65.0	65.0	65.0	65.0
10°	67.3	67.6	67.6	67.6	67.6	67.5	67.6	67.5	67.2	67.2	67.1
12.5°	72.0	72.0	71.7	71.5	71.0	70.9	70.8	70.3	69.8	69.5	69.5
15°	77.3	77.1	76.5	75.9	75.3	74.7	73.8	73.2	72.5	72.3	72.3
17.5°	84.2	83.8	82.3	81.2	79.5	78.3	77.2	76.1	75.3	75.0	74.9
20°	92.0	91.0	88.8	86.4	84.2	82.3	80.2	78.8	78.0	77.3	77.2
22.5°	101.8	100.4	96.6	92.8	88.8	86.1	83.5	81.6	80.1	79.4	79.1
25°	112.5	110.4	105.5	99.8	94.3	90.1	86.8	84.2	82.4	81.3	81.0
27.5°	126.1	123.1	115.8	107.2	99.9	94.6	90.1	87.1	84.7	83.1	82.8
30°	141.9	138.8	126.7	115.4	106.2	98.7	93.8	89.8	86.9	85.0	84.6
32.5°	160.8	155.1	141.2	125.2	112.6	103.5	97.2	92.5	89.0	86.8	86.2
35°	180.0	174.1	155.9	135.6	119.5	108.4	100.9	95.3	91.3	88.6	88.3
37.5°	201.5	194.3	173.0	147.4	126.9	113.6	104.3	97.9	93.1	90.2	89.9
40°	224.6	217.3	191.3	160.9	135.6	118.7	107.6	100.3	95.0	91.8	91.4
42.5°	247.3	238.7	210.0	174.5	144.5	124.3	111.4	102.9	96.6	93.3	92.8
45°	267.0	259.5	228.8	190.1	154.8	130.0	115.2	105.4	98.4	94.7	94.2
47.5°	289.4	281.3	249.5	204.5	164.7	136.6	119.0	107.6	99.9	96.0	95.5
50°	309.1	301.8	267.8	217.8	174.1	142.8	122.4	109.6	101.1	96.9	96.3
52.5°	327.0	320.5	284.7	230.2	182.2	148.5	125.5	111.1	102.0	97.3	96.6
55°	345.0	336.7	299.3	241.2	188.6	153.0	128.1	111.8	101.8	97.0	96.3
57.5°	358.6	350.7	310.0	249.0	193.4	156.0	129.6	111.7	101.0	95.8	95.0
60°	367.8	359.0	316.3	252.8	195.0	157.0	129.6	110.4	98.9	93.3	92.5
62°	371.2	361.1	317.5	253.3	194.3	156.0	128.7	108.4	96.2	90.7	89.9
62.5°	371.3	360.9	317.1	252.9	194.0	155.6	128.1	107.7	95.5	89.9	89.1
65°	365.3	354.9	312.2	248.7	189.3	151.9	124.3	103.7	90.7	85.3	84.4
67.5°	348.1	340.1	300.4	238.9	181.3	145.1	118.7	98.0	85.1	79.4	79.0
70°	324.1	316.8	281.3	223.9	169.8	135.2	110.3	90.3	78.0	72.8	71.8
72.5°	294.0	284.6	254.0	203.9	153.3	121.7	99.4	80.8	69.8	65.2	64.6
75°	256.6	245.3	219.8	177.5	133.5	105.4	86.6	70.1	60.4	56.4	56.8
77.5°	209.0	203.7	177.7	141.5	108.7	87.2	71.0	59.4	51.1	47.8	47.5
80°	157.8	152.7	134.5	107.5	82.1	66.0	55.0	46.8	41.1	38.2	38.1
82.5°	107.0	102.2	88.4	72.1	56.0	46.7	39.8	34.5	30.9	29.6	29.6
85°	58.8	54.7	46.8	39.0	31.6	26.7	25.7	23.0	22.0	21.8	22.0
87.5°	18.3	18.2	15.5	12.7	11.1	11.2	10.1	10.4	9.8	9.7	10.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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NVLAP Lab Code: 200050-0



Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021
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