

Scaled data based on original data using
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: P401748

Luminaire Tested: **ENT-SA1E-827-U-T2**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401748
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1E-827-U-T2
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5147 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

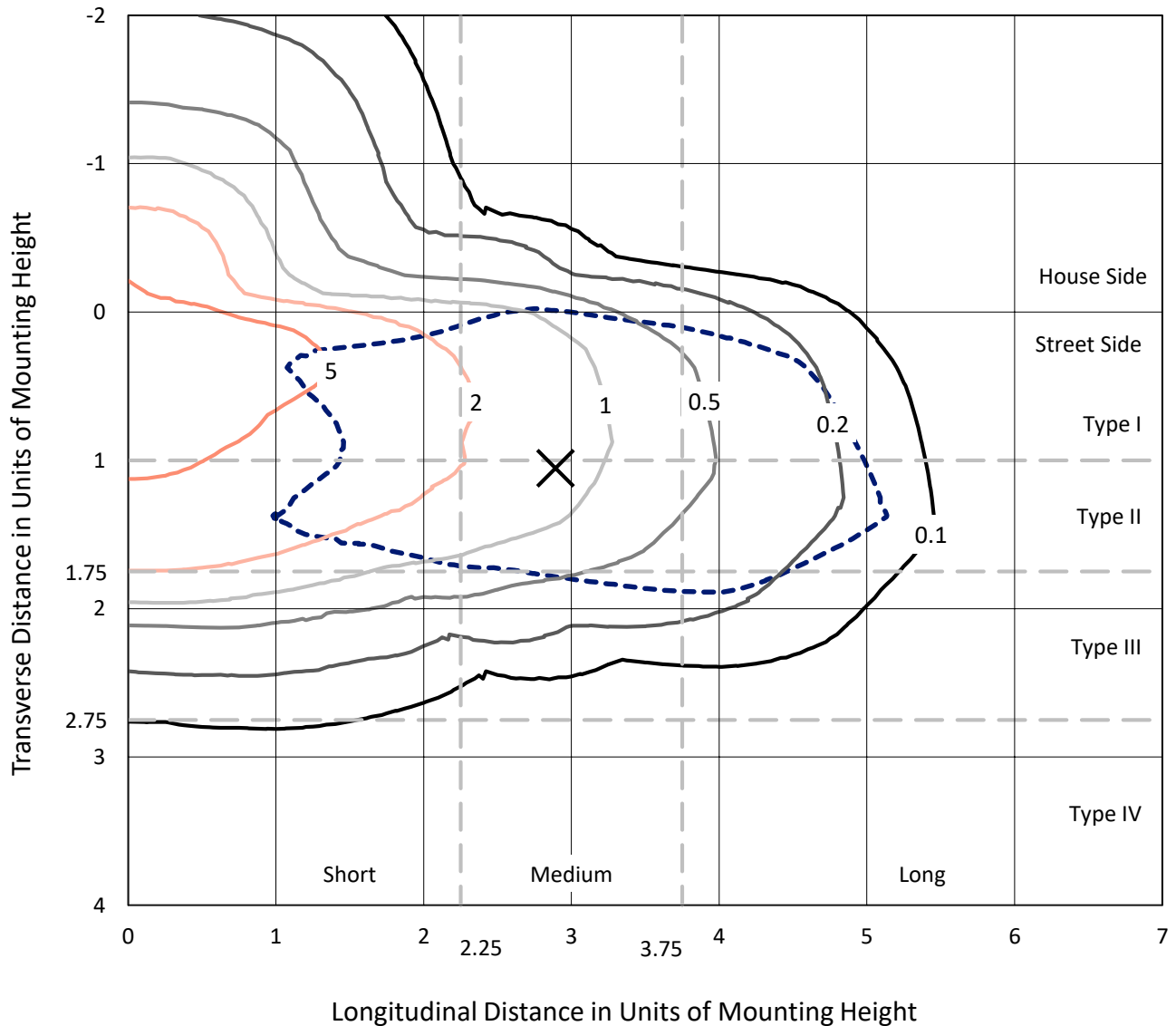
Input Watts (W): 57.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

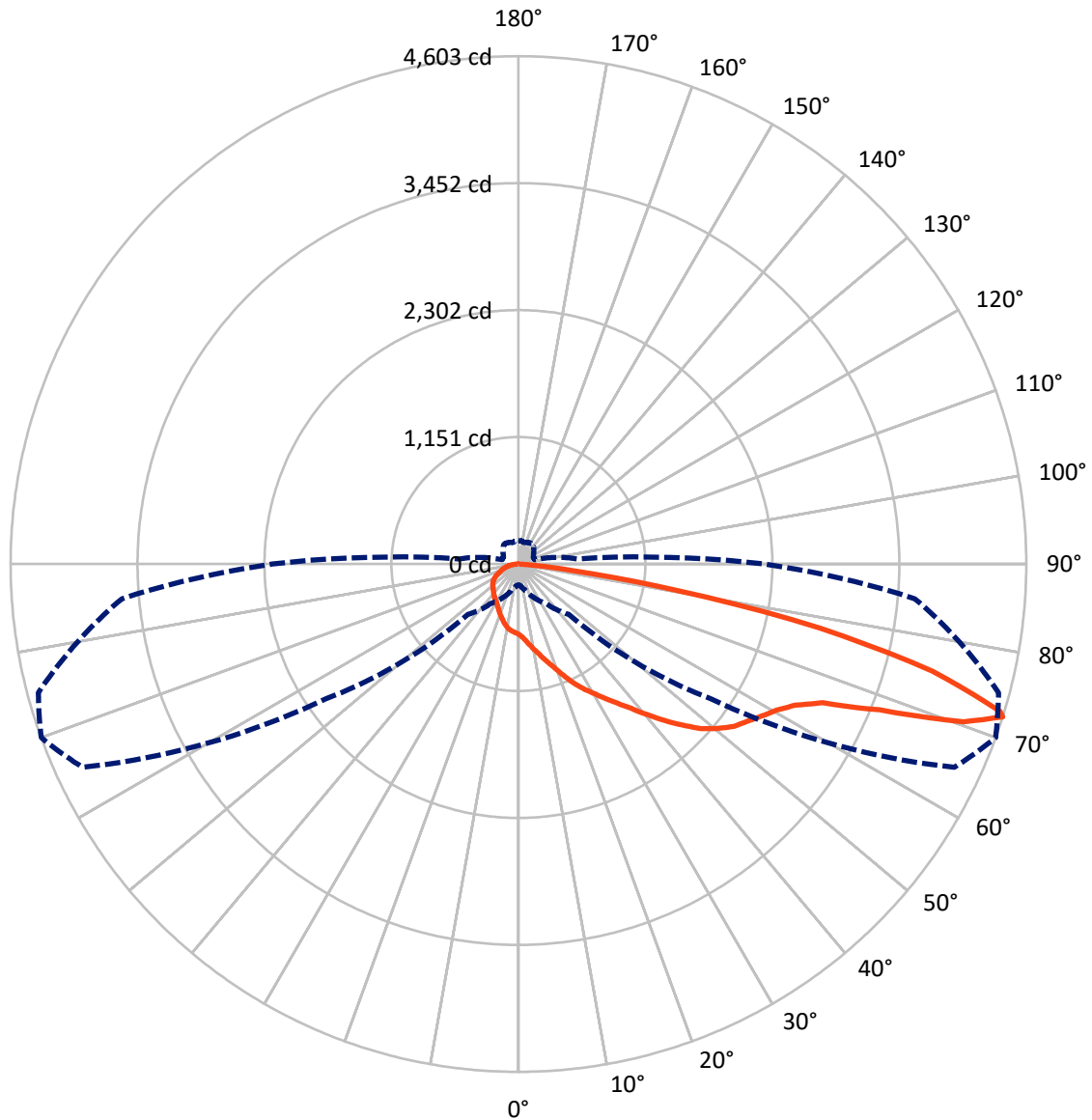
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.9 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	956.4	0.0	956.4
	% Fixture	18.6	0.0	18.6
Street Side	Lumens	4190.6	0.0	4190.6
	% Fixture	81.4	0.0	81.4
Total	Lumens	5147.0	0.0	5147.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.1	1.2
10°-20°	205.6	4.0
20°-30°	364.0	7.1
30°-40°	541.2	10.5
40°-50°	785.1	15.3
50°-60°	1072.6	20.8
60°-70°	1174.3	22.8
70°-80°	835.3	16.2
80°-90°	104.9	2.0
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°	5147.0	100.0
0°-180°	5147.0	100.0



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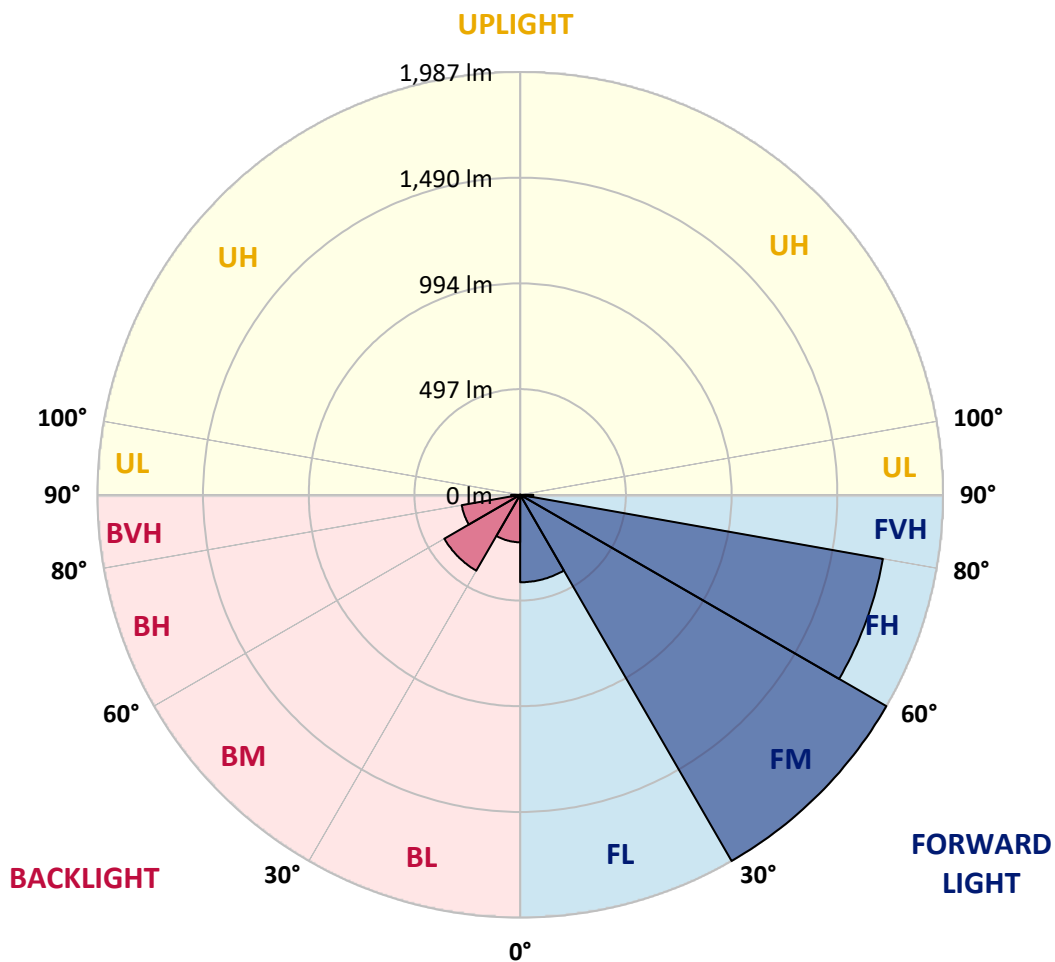
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	410.8	8.0			
FM	(30°-60°)	1987.1	38.6			
FH	(60°-80°)	1730.8	33.6			G1/1800
FVH	(80°-90°)	61.9	1.2			G1/100
BL	(0°-30°)	222.8	4.3	B1/500		
BM	(30°-60°)	411.8	8.0	B1/1000		
BH	(60°-80°)	278.8	5.4	B1/500		G1/500
BVH	(80°-90°)	42.9	0.8			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	637.4	637.4	637.4	637.4	637.4	637.4	637.4	637.4	637.4	637.4	637.4
2.5°	708.7	705.1	705.8	699.2	695.5	686.7	677.1	666.8	661.7	658.0	645.5
5°	777.8	777.8	780.8	775.6	761.7	747.0	730.1	707.3	697.7	684.5	659.5
7.5°	835.2	836.7	836.7	835.2	822.7	806.5	784.5	756.5	741.1	722.0	683.0
10°	864.6	868.3	871.2	873.4	871.9	862.4	837.4	808.7	787.4	762.4	710.2
12.5°	879.3	880.8	885.9	896.9	905.8	913.1	894.7	860.9	839.6	809.5	739.6
15°	895.5	895.5	900.6	914.6	931.5	951.3	949.1	922.7	899.9	862.4	777.1
17.5°	905.8	908.7	918.3	933.0	956.5	989.6	1006.5	991.8	962.4	922.7	817.5
20°	899.9	902.1	921.2	949.9	980.0	1022.7	1065.3	1065.3	1037.4	991.8	862.4
22.5°	910.9	914.6	927.8	955.0	996.2	1051.3	1121.2	1145.4	1121.2	1071.2	914.6
25°	953.6	952.1	963.1	974.1	1009.4	1077.8	1169.0	1231.5	1209.4	1154.3	965.3
27.5°	1015.3	1015.3	1021.2	1020.5	1033.0	1099.9	1210.9	1307.2	1288.8	1222.6	1007.2
30°	1086.6	1088.1	1086.6	1085.9	1083.7	1130.0	1248.4	1374.8	1365.3	1299.8	1045.5
32.5°	1173.4	1177.1	1171.2	1156.5	1147.6	1173.4	1280.0	1450.6	1453.5	1376.3	1083.0
35°	1282.2	1288.1	1266.0	1244.7	1222.6	1234.4	1316.7	1521.9	1551.3	1463.0	1128.5
37.5°	1391.0	1400.6	1396.9	1339.5	1308.7	1307.9	1371.1	1610.8	1660.1	1576.3	1193.2
40°	1482.9	1491.0	1495.4	1443.2	1400.6	1399.1	1451.3	1703.5	1793.9	1706.4	1269.7
42.5°	1543.9	1551.3	1564.5	1533.6	1493.9	1512.3	1539.5	1795.4	1938.0	1865.2	1363.8
45°	1610.1	1616.0	1624.1	1606.4	1585.8	1638.8	1651.3	1897.6	2082.1	2035.8	1474.1
47.5°	1680.7	1686.6	1691.0	1677.7	1670.4	1744.6	1760.8	2002.0	2227.7	2212.2	1581.4
50°	1758.6	1760.8	1765.2	1758.6	1760.8	1840.9	1851.2	2093.9	2343.1	2396.0	1693.2
52.5°	1892.4	1895.3	1896.8	1865.2	1854.2	1902.0	1924.0	2191.6	2444.5	2548.9	1791.7
55°	1998.3	2008.6	2054.9	2034.3	2007.8	1945.3	1984.3	2270.3	2516.6	2691.6	1894.6
57.5°	1911.5	1935.0	2050.5	2147.5	2221.8	2072.5	2055.6	2351.2	2599.7	2814.3	2014.5
60°	1659.3	1693.9	1861.5	2063.7	2304.1	2364.4	2201.9	2451.9	2690.1	2942.3	2143.1
62.5°	1150.6	1185.9	1417.5	1740.2	2165.2	2531.3	2602.6	2630.5	2815.8	3073.1	2310.7
65°	551.4	587.4	778.6	1119.0	1710.1	2424.0	3069.5	3001.1	3027.6	3239.3	2557.8
67.5°	350.7	369.8	444.8	609.5	994.7	1888.0	3237.1	3739.2	3529.0	3622.3	3049.6
70°	256.6	261.0	325.7	422.0	590.4	1102.8	2858.5	4445.8	4281.1	4270.8	3642.9
72°	189.7	197.0	247.0	336.7	436.7	644.8	2126.9	4359.7	4603.1	4505.3	3607.6
72.5°	178.7	184.5	227.9	318.3	412.4	566.1	1905.6	4259.8	4563.4	4511.9	3540.0
75°	130.1	134.5	155.9	226.4	319.1	327.9	1017.5	3269.4	3875.2	4307.5	3209.2
77.5°	89.7	92.6	103.7	139.0	218.4	222.0	431.6	2232.1	2796.7	3444.4	2468.1
80°	54.4	55.9	62.5	75.7	139.0	131.6	177.9	1166.8	1459.4	1872.6	1144.7
82.5°	22.8	23.5	27.2	30.1	58.8	62.5	72.0	380.8	483.0	585.2	330.1
85°	0.0	0.0	0.7	0.7	1.5	6.6	10.3	47.1	71.3	85.3	59.6
87.5°	0.0	0.0	0.7	0.7	0.7	1.5	1.5	2.2	2.9	2.9	4.4
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°	637.4	637.4	637.4	637.4	637.4	637.4	637.4	637.4	637.4	637.4	637.4
2.5°	639.6	636.7	627.9	620.5	614.6	605.1	604.3	597.0	597.0	594.8	593.3
5°	649.9	640.4	622.7	606.5	594.8	580.8	574.2	566.1	561.0	558.0	558.8
7.5°	663.2	647.0	616.8	589.6	567.6	549.9	539.6	533.0	529.3	527.9	527.9
10°	681.5	656.5	607.3	566.1	538.2	524.9	519.8	519.1	519.8	520.5	521.3
12.5°	702.1	663.2	589.6	538.2	516.1	511.0	513.9	520.5	526.4	528.6	528.6
15°	723.4	667.6	565.4	512.4	499.2	504.3	514.6	527.1	536.7	542.6	544.0
17.5°	745.5	668.3	539.6	488.9	484.5	497.7	516.1	536.0	551.4	561.0	562.4
20°	769.0	666.8	509.5	467.6	469.8	491.8	517.6	544.8	565.4	577.9	579.3
22.5°	794.8	660.9	480.1	447.0	457.3	486.0	516.1	547.7	569.8	584.5	587.4
25°	819.7	649.2	450.7	428.6	448.5	480.1	508.8	536.0	557.3	571.3	574.9
27.5°	833.0	624.2	422.7	414.7	441.9	471.3	491.8	510.2	522.0	530.8	534.5
30°	835.2	588.9	399.9	405.1	434.5	458.8	470.5	473.5	471.3	474.2	470.5
32.5°	830.8	550.7	381.6	397.7	422.7	441.1	444.1	435.2	422.0	403.6	404.4
35°	827.8	508.8	366.9	387.5	407.3	419.1	413.9	399.9	375.0	352.9	351.4
37.5°	833.0	470.5	354.4	374.2	387.5	392.6	385.2	366.9	344.8	325.7	323.5
40°	847.7	442.6	342.6	359.5	366.1	369.8	361.0	344.8	336.0	322.0	319.8
42.5°	876.4	423.5	331.6	343.3	346.3	350.0	341.1	330.1	338.2	335.3	335.3
45°	916.1	414.7	322.0	327.9	330.8	336.7	331.6	322.0	330.8	313.9	311.0
47.5°	967.5	417.6	315.4	312.5	321.3	331.6	325.7	313.9	311.0	280.8	275.7
50°	1021.9	433.0	308.8	300.0	311.0	325.0	317.6	299.2	281.6	266.1	263.2
52.5°	1085.9	458.8	302.9	286.0	299.2	317.6	312.5	292.6	274.2	263.2	261.0
55°	1156.5	483.8	295.6	269.8	283.8	315.4	313.9	288.2	263.9	258.8	257.3
57.5°	1235.9	504.3	286.7	251.4	268.3	308.8	307.3	277.9	261.0	256.6	255.8
60°	1335.1	528.6	271.3	230.1	252.9	296.3	294.8	272.8	254.4	250.7	249.2
62.5°	1470.4	573.5	244.8	210.3	236.7	274.2	283.1	262.5	244.8	244.1	244.1
65°	1693.2	660.2	217.6	193.4	218.4	252.9	267.6	250.7	236.0	239.7	239.7
67.5°	2114.4	777.1	189.7	177.2	200.7	232.3	254.4	238.9	226.4	233.8	233.8
70°	2439.4	733.7	167.6	161.7	183.1	213.9	237.5	226.4	214.7	227.2	225.7
72°	2225.5	537.4	152.9	149.2	168.4	198.5	222.8	214.7	202.2	212.5	209.5
72.5°	2136.5	488.2	148.5	145.6	163.9	195.6	219.8	211.7	198.5	208.8	204.4
75°	1863.7	411.7	129.4	127.9	145.6	175.7	200.7	196.3	183.1	188.9	184.5
77.5°	1542.5	347.0	108.8	111.8	124.2	156.6	180.9	176.4	163.9	163.2	162.5
80°	723.4	193.4	89.7	91.9	104.4	133.8	155.9	152.9	141.2	139.7	137.5
82.5°	209.5	92.6	69.1	70.6	83.8	109.5	133.8	132.3	123.5	121.3	116.2
85°	39.0	30.1	37.5	44.1	61.0	91.2	122.0	119.1	105.9	96.3	89.0
87.5°	2.2	5.9	12.5	21.3	39.0	68.4	98.5	96.3	84.5	72.8	73.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)