

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: P401460

Luminaire Tested: **ENT-SA1D-730-U-T2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401460  
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-SA1D-730-U-T2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5117 lumens  
Efficiency: N/A  
Efficacy: 118.7 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

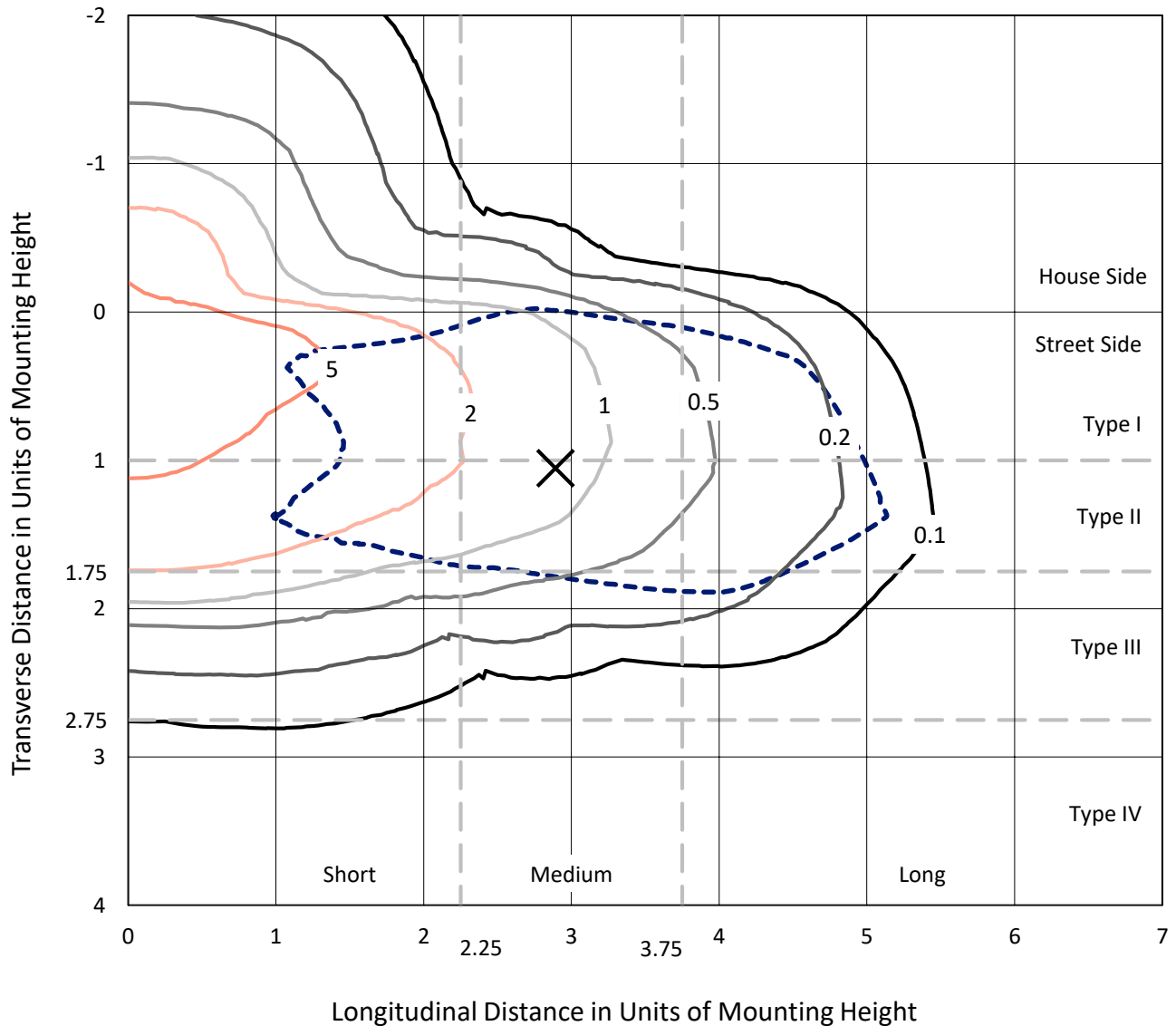
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

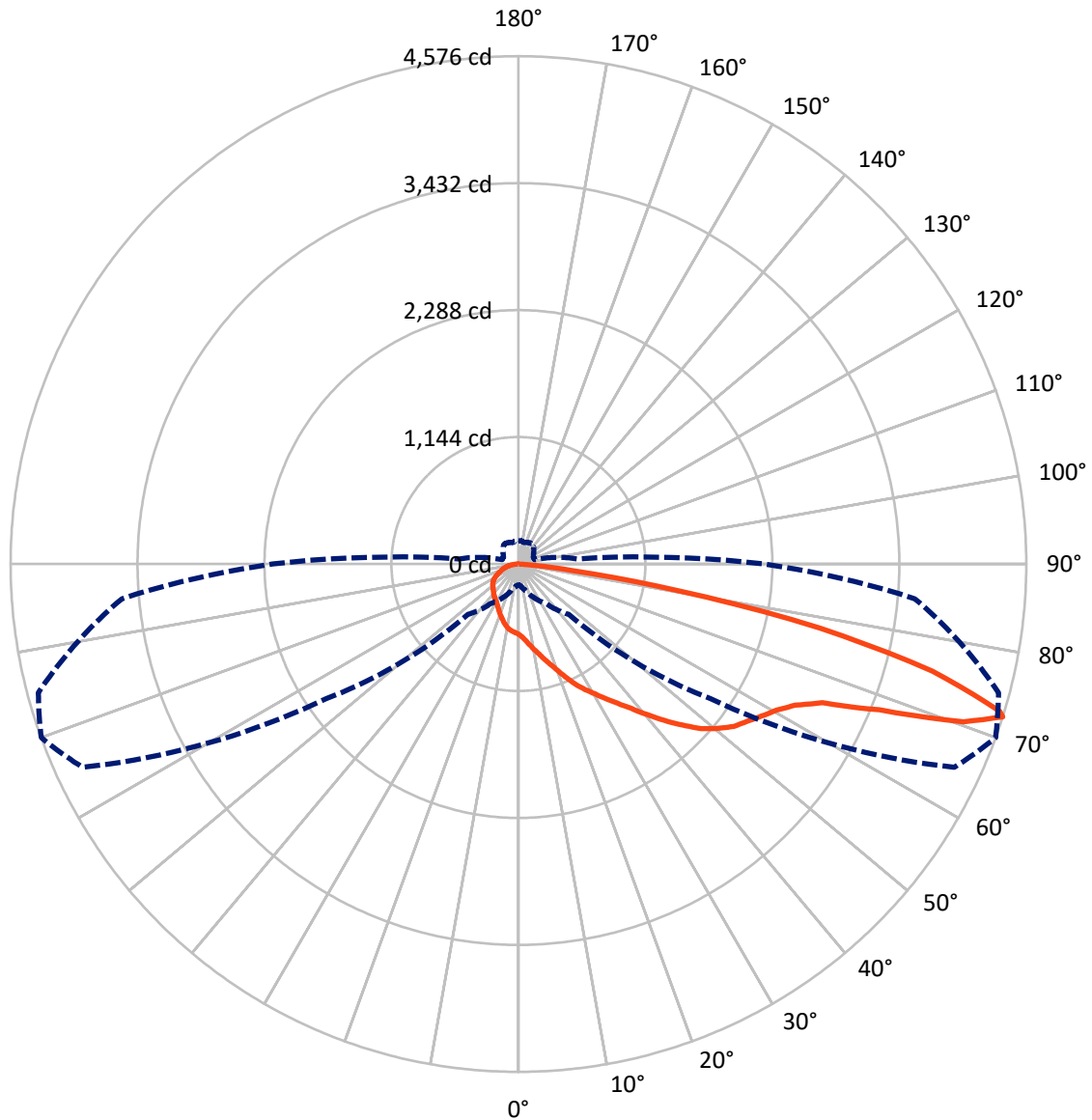
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.8 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
<b>House Side</b>	Lumens	950.8	0.0	950.8
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	4166.2	0.0	4166.2
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	5117.0	0.0	5117.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.7	1.2
10°-20°	204.4	4.0
20°-30°	361.9	7.1
30°-40°	538.0	10.5
40°-50°	780.5	15.3
50°-60°	1066.3	20.8
60°-70°	1167.5	22.8
70°-80°	830.4	16.2
80°-90°	104.3	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°	5117.0	100.0
0°-180°	5117.0	100.0



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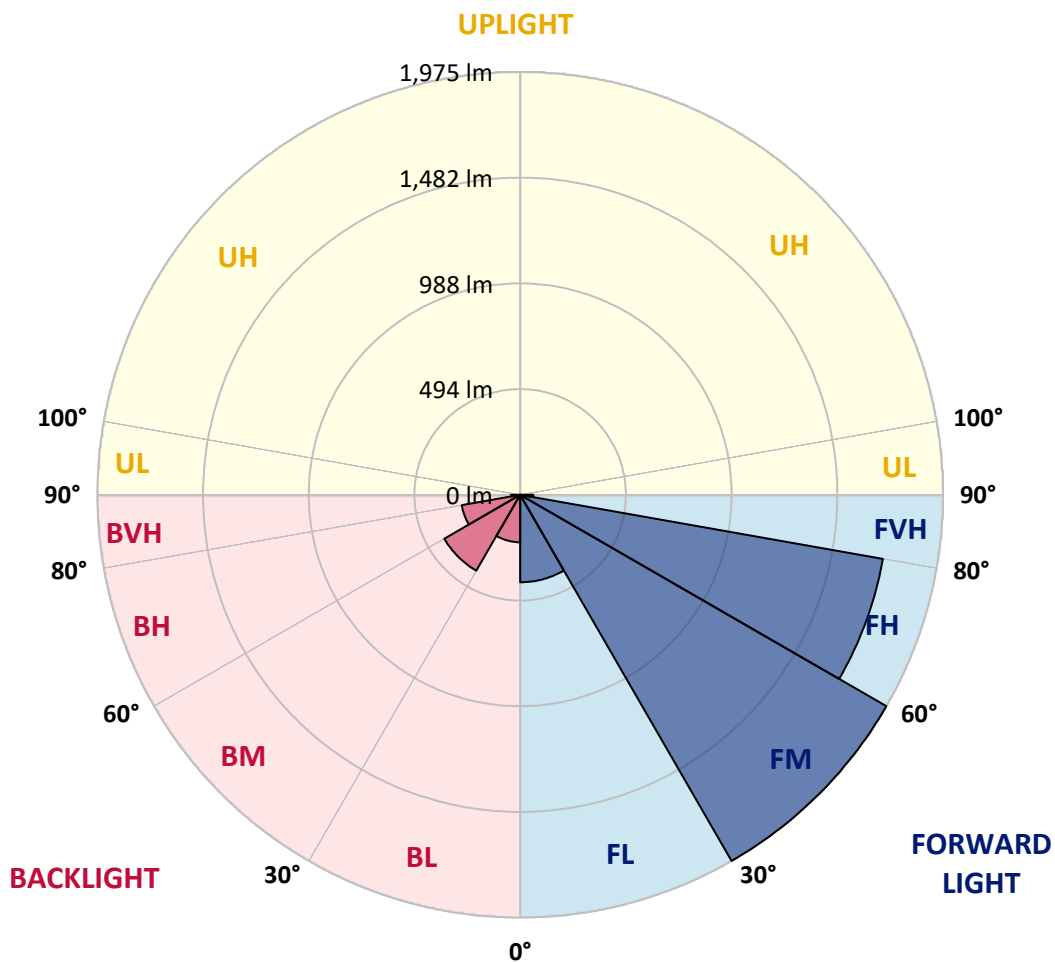
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	408.4	8.0			
FM	(30°-60°)	1975.5	38.6			
FH	(60°-80°)	1720.7	33.6			G1/1800
FVH	(80°-90°)	61.6	1.2			G1/100
BL	(0°-30°)	221.6	4.3	B1/500		
BM	(30°-60°)	409.4	8.0	B1/1000		
BH	(60°-80°)	277.2	5.4	B1/500		G1/500
BVH	(80°-90°)	42.7	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°	633.7	633.7	633.7	633.7	633.7	633.7	633.7	633.7	633.7	633.7	633.7
2.5°	704.6	700.9	701.7	695.1	691.4	682.7	673.2	662.9	657.8	654.2	641.7
5°	773.3	773.3	776.2	771.1	757.2	742.6	725.8	703.1	693.6	680.5	655.6
7.5°	830.3	831.8	831.8	830.3	817.9	801.8	779.9	752.1	736.8	717.8	679.0
10°	859.6	863.2	866.1	868.3	866.9	857.4	832.5	804.0	782.8	758.0	706.1
12.5°	874.2	875.6	880.8	891.7	900.5	907.8	889.5	855.9	834.7	804.7	735.3
15°	890.3	890.3	895.4	909.3	926.1	945.8	943.6	917.3	894.6	857.4	772.6
17.5°	900.5	903.4	912.9	927.5	950.9	983.8	1000.6	986.0	956.8	917.3	812.8
20°	894.6	896.8	915.8	944.3	974.3	1016.7	1059.1	1059.1	1031.3	986.0	857.4
22.5°	905.6	909.3	922.4	949.5	990.4	1045.2	1114.6	1138.8	1114.6	1064.9	909.3
25°	948.0	946.5	957.5	968.5	1003.5	1071.5	1162.2	1224.3	1202.4	1147.5	959.7
27.5°	1009.4	1009.4	1015.2	1014.5	1026.9	1093.4	1203.8	1299.6	1281.3	1215.5	1001.4
30°	1080.3	1081.8	1080.3	1079.6	1077.4	1123.4	1241.1	1366.8	1357.3	1292.3	1039.4
32.5°	1166.5	1170.2	1164.3	1149.7	1141.0	1166.5	1272.5	1442.1	1445.0	1368.3	1076.6
35°	1274.7	1280.6	1258.6	1237.4	1215.5	1227.2	1309.1	1513.0	1542.2	1454.5	1122.0
37.5°	1382.9	1392.4	1388.7	1331.7	1301.0	1300.3	1363.2	1601.4	1650.4	1567.1	1186.3
40°	1474.3	1482.3	1486.7	1434.8	1392.4	1390.9	1442.8	1693.5	1783.4	1696.5	1262.3
42.5°	1534.9	1542.2	1555.4	1524.7	1485.2	1503.5	1530.5	1784.9	1926.7	1854.3	1355.8
45°	1600.7	1606.6	1614.6	1597.1	1576.6	1629.2	1641.6	1886.5	2070.0	2023.9	1465.5
47.5°	1670.9	1676.7	1681.1	1667.9	1660.6	1734.5	1750.5	1990.3	2214.7	2199.3	1572.2
50°	1748.4	1750.5	1754.9	1748.4	1750.5	1830.2	1840.4	2081.6	2329.4	2382.1	1683.3
52.5°	1881.4	1884.3	1885.8	1854.3	1843.4	1890.9	1912.8	2178.9	2430.3	2534.1	1781.2
55°	1986.6	1996.9	2042.9	2022.4	1996.1	1934.0	1972.7	2257.1	2501.9	2675.9	1883.6
57.5°	1900.4	1923.8	2038.5	2135.0	2208.8	2060.5	2043.6	2337.5	2584.5	2797.9	2002.7
60°	1649.7	1684.0	1850.7	2051.7	2290.7	2350.6	2189.1	2437.6	2674.4	2925.1	2130.6
62.5°	1143.9	1179.0	1409.2	1730.1	2152.5	2516.5	2587.4	2615.2	2799.4	3055.2	2297.3
65°	548.2	584.0	774.0	1112.5	1700.1	2409.8	3051.6	2983.6	3009.9	3220.4	2542.9
67.5°	348.6	367.7	442.2	605.9	988.9	1877.0	3218.2	3717.4	3508.4	3601.2	3031.8
70°	255.1	259.5	323.8	419.5	586.9	1096.4	2841.8	4419.8	4256.1	4245.9	3621.7
72°	188.6	195.9	245.6	334.8	434.2	641.0	2114.5	4334.3	4576.3	4479.1	3586.6
72.5°	177.6	183.5	226.6	316.5	410.0	562.8	1894.5	4234.9	4536.8	4485.6	3519.4
75°	129.4	133.8	155.0	225.1	317.2	326.0	1011.6	3250.4	3852.7	4282.4	3190.4
77.5°	89.2	92.1	103.1	138.1	217.1	220.7	429.0	2219.1	2780.4	3424.3	2453.7
80°	54.1	55.5	62.1	75.3	138.1	130.8	176.9	1160.0	1450.9	1861.6	1138.0
82.5°	22.7	23.4	27.0	30.0	58.5	62.1	71.6	378.6	480.2	581.8	328.2
85°	0.0	0.0	0.7	0.7	1.5	6.6	10.2	46.8	70.9	84.8	59.2
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°	633.7	633.7	633.7	633.7	633.7	633.7	633.7	633.7	633.7	633.7	633.7
2.5°	635.9	633.0	624.2	616.9	611.0	601.5	600.8	593.5	593.5	591.3	589.8
5°	646.1	636.6	619.1	603.0	591.3	577.4	570.8	562.8	557.7	554.8	555.5
7.5°	659.3	643.2	613.2	586.2	564.3	546.7	536.5	529.9	526.3	524.8	524.8
10°	677.6	652.7	603.7	562.8	535.0	521.9	516.8	516.0	516.8	517.5	518.2
12.5°	698.0	659.3	586.2	535.0	513.1	508.0	510.9	517.5	523.3	525.5	525.5
15°	719.2	663.7	562.1	509.4	496.3	501.4	511.6	524.1	533.6	539.4	540.9
17.5°	741.1	664.4	536.5	486.1	481.7	494.8	513.1	532.8	548.2	557.7	559.2
20°	764.5	662.9	506.5	464.9	467.1	489.0	514.6	541.6	562.1	574.5	576.0
22.5°	790.1	657.1	477.3	444.4	454.6	483.1	513.1	544.5	566.5	581.1	584.0
25°	815.0	645.4	448.1	426.1	445.9	477.3	505.8	532.8	554.0	567.9	571.6
27.5°	828.1	620.5	420.3	412.2	439.3	468.5	489.0	507.3	519.0	527.7	531.4
30°	830.3	585.5	397.6	402.7	432.0	456.1	467.8	470.7	468.5	471.4	467.8
32.5°	825.9	547.5	379.3	395.4	420.3	438.5	441.5	432.7	419.5	401.3	402.0
35°	823.0	505.8	364.7	385.2	404.9	416.6	411.5	397.6	372.8	350.8	349.4
37.5°	828.1	467.8	352.3	372.0	385.2	390.3	383.0	364.7	342.8	323.8	321.6
40°	842.7	440.0	340.6	357.4	364.0	367.7	358.9	342.8	334.0	320.1	317.9
42.5°	871.3	421.0	329.6	341.3	344.3	347.9	339.1	328.2	336.2	333.3	333.3
45°	910.7	412.2	320.1	326.0	328.9	334.8	329.6	320.1	328.9	312.1	309.2
47.5°	961.9	415.2	313.6	310.6	319.4	329.6	323.8	312.1	309.2	279.2	274.1
50°	1016.0	430.5	307.0	298.2	309.2	323.1	315.8	297.5	279.9	264.6	261.7
52.5°	1079.6	456.1	301.1	284.3	297.5	315.8	310.6	290.9	272.6	261.7	259.5
55°	1149.7	480.9	293.8	268.2	282.1	313.6	312.1	286.5	262.4	257.3	255.8
57.5°	1228.7	501.4	285.1	250.0	266.8	307.0	305.5	276.3	259.5	255.1	254.4
60°	1327.3	525.5	269.7	228.8	251.4	294.6	293.1	271.2	252.9	249.2	247.8
62.5°	1461.8	570.1	243.4	209.0	235.4	272.6	281.4	260.9	243.4	242.7	242.7
65°	1683.3	656.4	216.4	192.2	217.1	251.4	266.1	249.2	234.6	238.3	238.3
67.5°	2102.1	772.6	188.6	176.2	199.5	231.0	252.9	237.5	225.1	232.4	232.4
70°	2425.2	729.5	166.6	160.8	182.0	212.7	236.1	225.1	213.4	225.9	224.4
72°	2212.5	534.3	152.0	148.4	167.4	197.3	221.5	213.4	201.0	211.2	208.3
72.5°	2124.0	485.3	147.6	144.7	163.0	194.4	218.5	210.5	197.3	207.6	203.2
75°	1852.9	409.3	128.6	127.2	144.7	174.7	199.5	195.2	182.0	187.8	183.5
77.5°	1533.5	345.0	108.2	111.1	123.5	155.7	179.8	175.4	163.0	162.3	161.5
80°	719.2	192.2	89.2	91.4	103.8	133.0	155.0	152.0	140.3	138.9	136.7
82.5°	208.3	92.1	68.7	70.2	83.3	108.9	133.0	131.6	122.8	120.6	115.5
85°	38.7	30.0	37.3	43.9	60.7	90.6	121.3	118.4	105.3	95.7	88.4
87.5°	2.2	5.8	12.4	21.2	38.7	68.0	97.9	95.7	84.1	72.4	73.1
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)