

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: P401462

Luminaire Tested: **ENT-SA1D-730-U-T3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401462  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1D-730-U-T3  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5235 lumens  
Efficiency: N/A  
Efficacy: 121.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

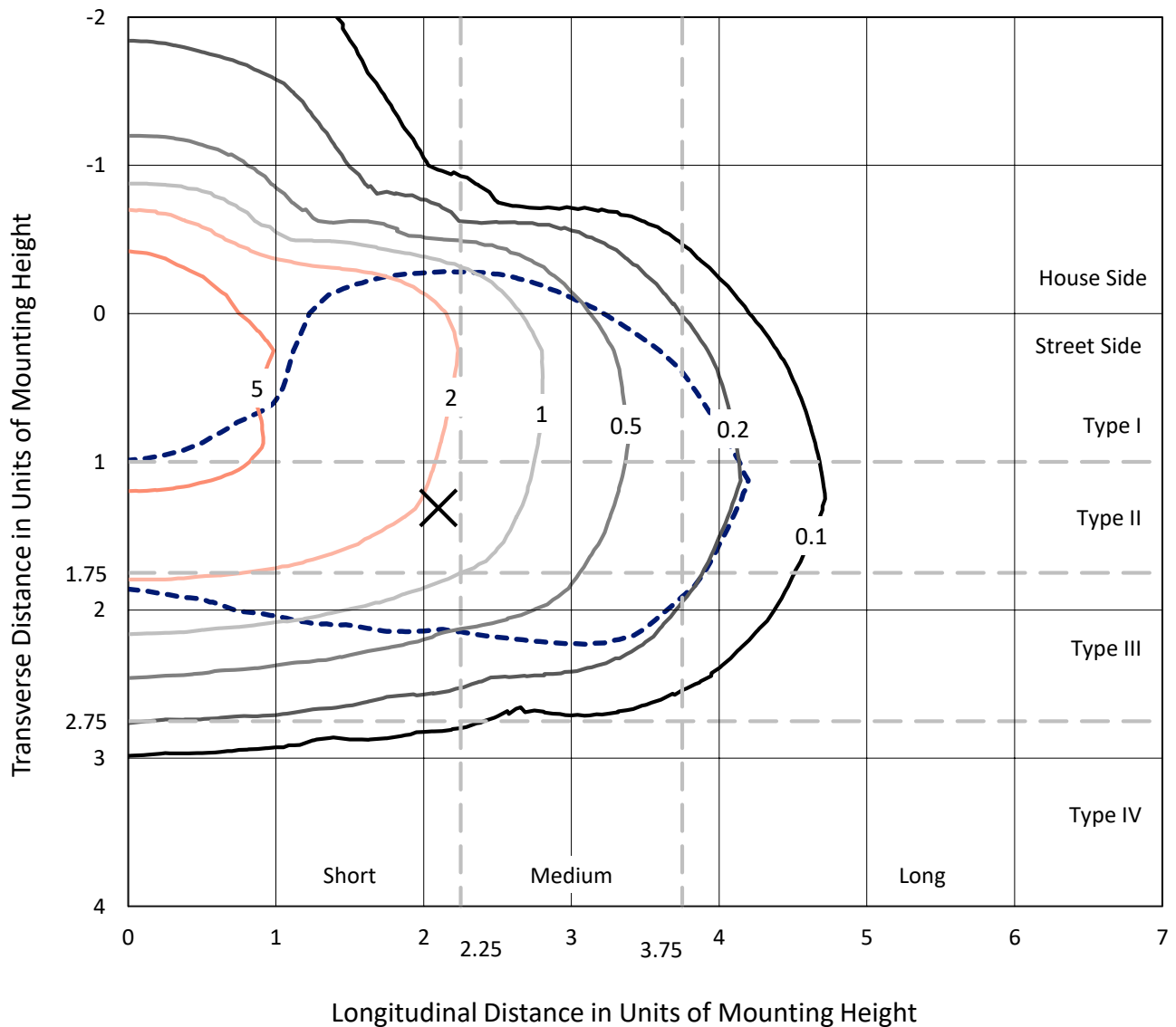
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

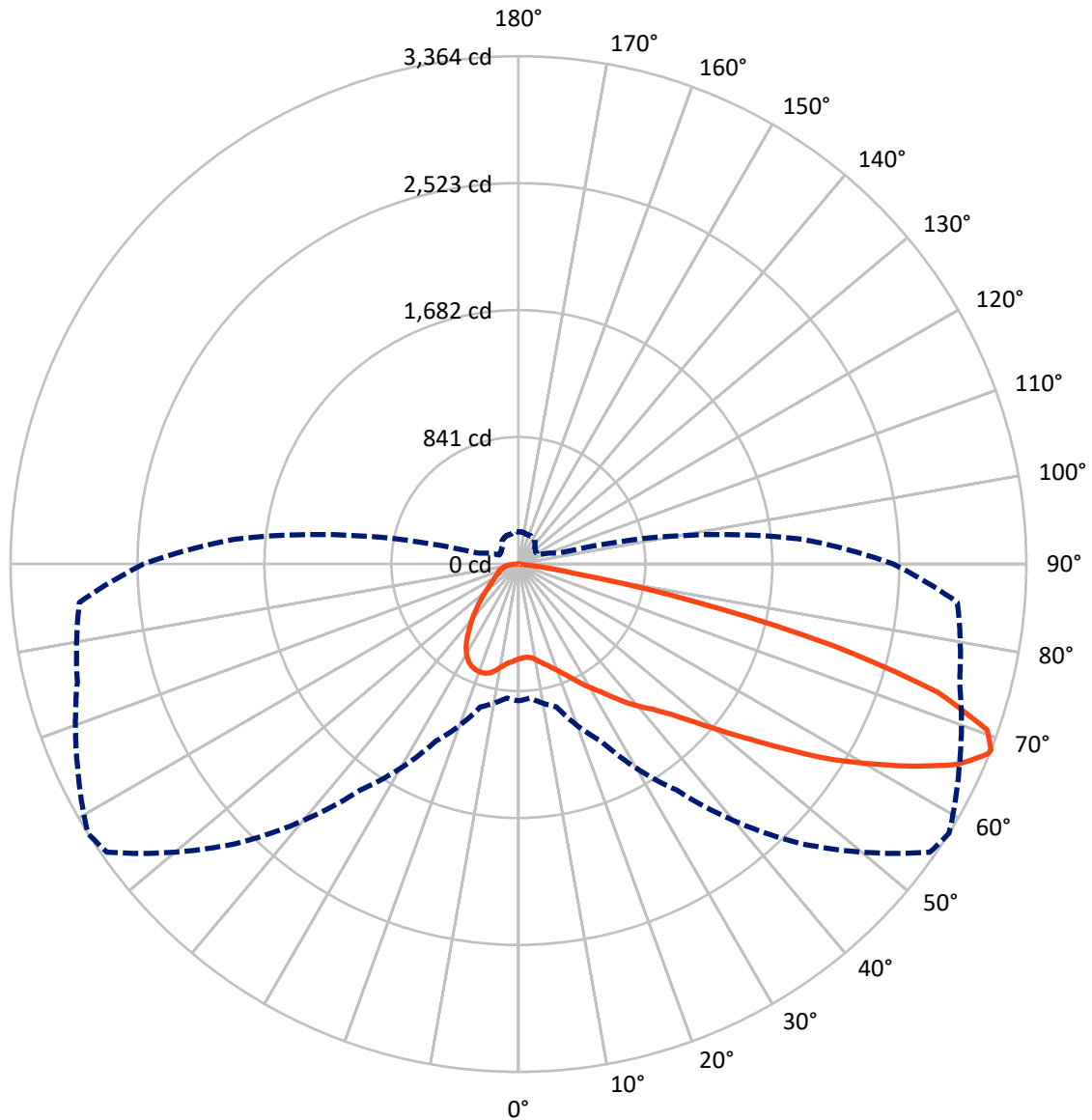
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1225.8	0.0	1225.8
	% Fixture	23.4	0.0	23.4
<b>Street Side</b>	Lumens	4009.2	0.0	4009.2
	% Fixture	76.6	0.0	76.6
<b>Total</b>	Lumens	5235.0	0.0	5235.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.9	1.2
10°-20°	202.5	3.9
20°-30°	364.2	7.0
30°-40°	535.0	10.2
40°-50°	784.7	15.0
50°-60°	1172.9	22.4
60°-70°	1371.5	26.2
70°-80°	676.2	12.9
80°-90°	66.0	1.3
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°	5235.0	100.0
0°-180°	5235.0	100.0



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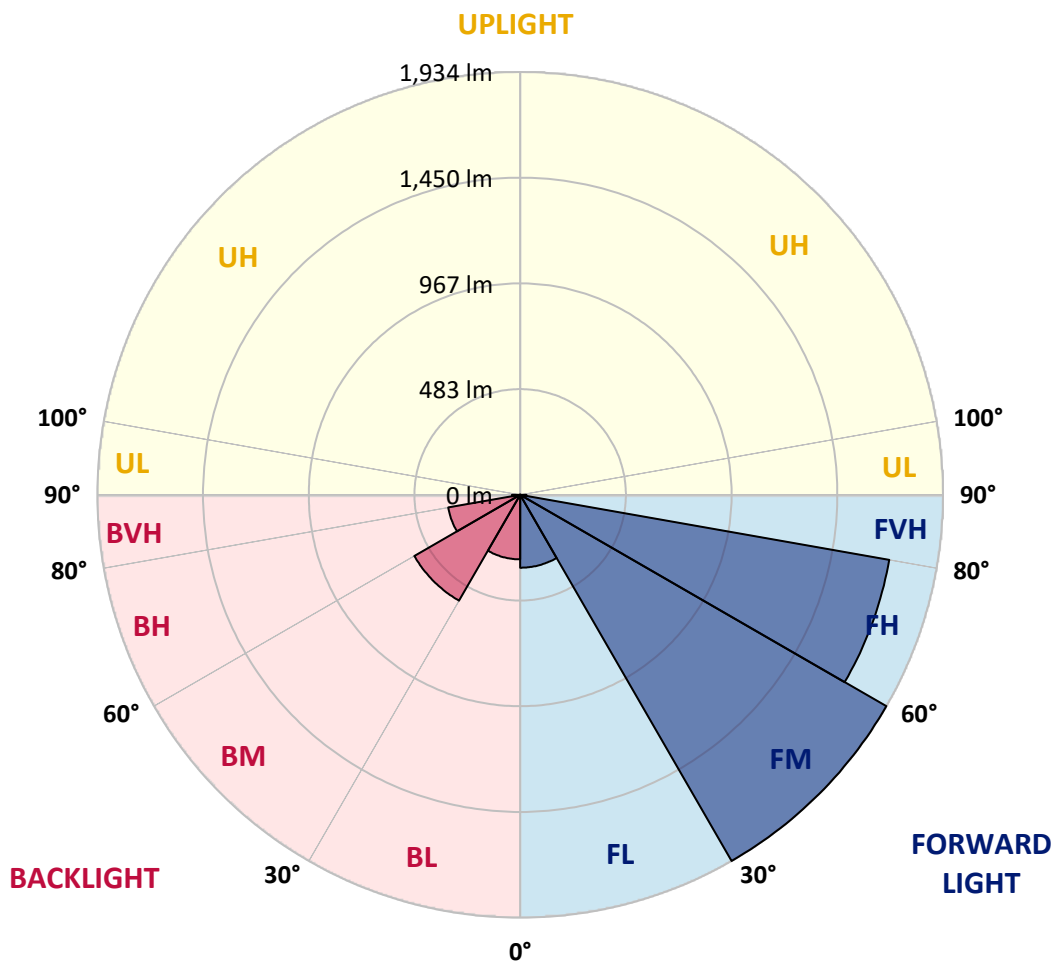
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	333.5	6.4			
FM	(30°-60°)	1933.6	36.9			
FH	(60°-80°)	1713.7	32.7			G1/1800
FVH	(80°-90°)	28.4	0.5			G1/100
BL	(0°-30°)	295.2	5.6	B1/500		
BM	(30°-60°)	559.0	10.7	B1/1000		
BH	(60°-80°)	334.0	6.4	B1/500		G1/500
BVH	(80°-90°)	37.6	0.7			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°	58°	65°	75°	85°
0°	628.7	628.7	628.7	628.7	628.7	628.7	628.7	628.7	628.7	628.7	628.7
2.5°	613.3	613.3	615.5	616.2	617.7	619.1	620.6	621.3	623.5	626.5	627.9
5°	608.2	608.9	610.4	611.1	613.3	616.2	618.4	619.9	623.5	629.4	633.0
7.5°	619.9	622.1	622.8	623.5	624.3	626.5	626.5	627.2	630.8	636.7	641.8
10°	638.9	640.3	642.5	644.7	646.9	648.4	644.0	644.7	646.2	652.0	659.4
12.5°	663.0	663.0	663.7	666.7	668.9	673.2	668.9	668.9	668.9	674.0	682.7
15°	690.1	688.6	688.6	691.5	692.2	695.2	693.0	693.0	695.9	701.0	709.8
17.5°	720.8	723.0	720.8	719.3	717.1	718.6	720.0	721.5	727.3	735.4	740.5
20°	765.3	769.0	767.5	761.7	752.2	747.8	752.9	755.8	767.5	777.0	777.8
22.5°	836.3	834.1	831.9	821.6	802.6	790.9	791.7	796.0	814.3	828.9	821.6
25°	902.0	904.2	904.2	889.6	864.8	840.6	842.8	845.0	863.3	876.5	856.7
27.5°	981.7	980.3	979.5	959.8	929.8	906.4	894.0	899.9	913.0	918.1	880.1
30°	1064.3	1070.2	1064.3	1036.5	1008.0	978.1	953.2	951.8	958.3	957.6	907.9
32.5°	1163.7	1158.6	1156.4	1124.3	1088.4	1049.0	1017.5	1012.4	1008.8	1003.7	940.8
35°	1240.5	1247.1	1247.1	1219.3	1176.9	1138.2	1089.2	1084.8	1076.0	1059.2	983.9
37.5°	1331.1	1329.7	1334.8	1302.6	1260.2	1222.9	1177.6	1165.2	1145.5	1120.6	1035.1
40°	1419.6	1423.2	1434.9	1396.2	1357.5	1328.2	1263.9	1241.2	1211.3	1188.6	1109.6
42.5°	1540.2	1545.3	1549.7	1517.5	1471.5	1445.2	1345.8	1317.2	1300.4	1296.0	1208.3
45°	1686.4	1695.2	1698.8	1669.6	1643.3	1580.4	1448.8	1422.5	1404.2	1423.2	1342.8
47.5°	1826.7	1822.4	1839.2	1838.4	1841.4	1766.1	1597.2	1557.7	1540.2	1588.4	1497.1
50°	1905.7	1912.3	1948.8	1986.1	2038.0	1983.9	1769.0	1729.5	1709.1	1769.0	1678.4
52.5°	1946.6	1955.4	2004.4	2108.9	2219.3	2193.7	1975.9	1932.0	1914.5	1972.9	1872.8
55°	1950.3	1955.4	2021.2	2183.5	2357.4	2365.5	2212.0	2170.3	2146.2	2184.2	2084.8
57.5°	1889.6	1874.3	1987.6	2194.4	2445.9	2544.6	2471.5	2441.5	2373.5	2414.5	2347.9
60°	1781.4	1796.8	1907.9	2149.1	2483.2	2684.2	2731.7	2686.4	2607.4	2624.3	2631.6
62.5°	1617.7	1637.4	1752.9	2043.9	2453.2	2802.6	2972.2	2949.6	2843.6	2834.8	2847.9
65°	1384.5	1372.8	1501.5	1813.6	2311.4	2842.1	3208.3	3198.8	3072.4	2969.3	2974.4
67.5°	998.5	987.6	1077.5	1399.8	1927.6	2695.2	3334.1	3355.3	3210.5	3028.5	2949.6
68°	906.4	891.1	981.0	1293.9	1828.9	2610.4	3327.5	3364.0	3220.7	3024.8	2918.8
70°	521.9	497.1	584.1	844.3	1346.5	2197.4	3193.0	3293.8	3196.6	2953.9	2717.8
72.5°	163.7	163.7	225.9	341.4	660.8	1390.3	2731.7	2903.5	2924.0	2684.9	2258.8
75°	102.3	102.3	117.7	161.5	263.2	589.9	1884.5	2146.2	2323.1	2260.2	1646.9
77.5°	69.4	68.0	78.2	100.1	146.9	189.3	945.9	1162.3	1421.0	1543.1	963.4
80°	38.0	38.7	48.2	59.9	83.3	87.7	277.8	392.5	625.7	733.2	365.5
82.5°	21.9	21.2	23.4	26.3	36.5	38.0	79.7	98.0	163.7	152.0	98.0
85°	0.0	0.7	0.7	0.7	1.5	3.7	10.2	15.4	24.9	34.4	24.1
87.5°	0.0	0.0	0.0	0.0	0.7	0.7	1.5	1.5	1.5	1.5	2.2
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°	628.7	628.7	628.7	628.7	628.7	628.7	628.7	628.7	628.7	628.7	628.7
2.5°	629.4	631.6	635.2	638.2	639.6	638.2	643.3	642.5	644.0	644.0	645.5
5°	636.0	638.9	645.5	649.1	652.8	654.2	660.1	661.5	664.5	665.9	665.2
7.5°	645.5	649.1	657.2	663.7	668.9	672.5	682.0	686.4	690.8	692.2	693.7
10°	663.0	668.1	676.9	684.9	692.2	697.4	705.4	711.3	715.6	717.1	718.6
12.5°	686.4	692.2	703.2	714.2	722.2	725.1	724.4	723.0	723.0	722.2	723.0
15°	713.4	719.3	733.2	743.4	744.1	734.6	721.5	714.9	713.4	713.4	714.2
17.5°	744.9	752.2	761.0	766.8	752.9	729.5	714.2	707.6	706.1	705.4	703.9
20°	780.7	785.1	788.0	780.7	750.0	723.0	705.4	695.9	688.6	687.9	684.9
22.5°	818.7	817.2	813.6	787.3	742.0	707.6	683.5	665.9	656.4	655.7	652.8
25°	846.5	840.6	829.7	788.7	727.3	682.7	648.4	620.6	608.2	602.3	603.8
27.5°	864.8	852.3	833.3	781.4	701.8	644.7	596.5	559.9	541.7	538.7	540.9
30°	886.7	867.0	836.3	763.2	665.2	591.4	528.5	492.0	481.7	476.6	478.1
32.5°	913.0	887.4	845.8	735.4	619.1	529.2	461.3	435.7	424.0	414.5	417.4
35°	947.4	915.2	861.1	695.9	560.7	463.4	413.0	389.6	368.4	358.2	358.9
37.5°	987.6	951.0	874.3	649.9	497.1	413.7	371.3	343.6	317.3	297.5	293.9
40°	1051.9	1021.9	885.2	598.7	436.4	372.8	330.4	299.0	274.1	254.4	252.2
42.5°	1159.4	1107.5	886.0	537.3	384.5	337.7	296.8	262.4	234.6	217.8	217.1
45°	1285.8	1205.4	870.6	471.5	339.2	302.6	266.8	228.1	212.0	201.0	199.6
47.5°	1435.7	1318.0	837.0	410.1	300.4	268.3	236.1	212.7	201.0	193.0	193.0
50°	1606.7	1450.3	803.4	357.5	263.2	240.5	218.6	206.1	197.4	190.1	189.3
52.5°	1799.7	1606.7	792.4	304.1	232.5	214.9	212.7	201.0	193.7	188.6	187.1
55°	2030.0	1782.2	802.6	262.4	208.3	204.7	209.1	199.6	194.4	186.4	184.2
57.5°	2296.0	1953.2	791.7	227.3	191.5	195.2	204.7	199.6	195.2	184.9	182.0
60°	2546.8	2106.0	717.1	198.1	175.4	183.5	198.8	193.0	186.4	184.2	182.7
62.5°	2681.3	2155.7	571.6	175.4	163.0	171.8	189.3	182.0	177.6	182.7	183.5
65°	2682.7	2099.4	420.3	158.6	152.8	161.5	179.8	177.6	180.6	192.3	194.4
67.5°	2533.6	1928.4	296.8	143.3	142.5	153.5	184.2	198.8	201.0	212.7	212.7
68°	2482.4	1886.0	275.6	141.1	140.4	153.5	187.9	202.5	203.9	214.9	214.2
70°	2201.7	1594.3	199.6	132.3	136.7	164.5	207.6	212.7	203.9	216.4	215.6
72.5°	1720.8	1179.1	149.1	122.8	130.1	162.3	209.1	203.9	190.8	193.7	190.1
75°	1163.0	751.5	122.8	112.6	115.5	137.4	190.1	192.3	176.9	174.0	169.6
77.5°	608.9	352.3	99.4	100.1	103.1	119.2	169.6	174.7	160.8	152.0	150.6
80°	224.4	139.6	81.1	88.4	89.9	104.5	145.5	153.5	140.4	133.8	132.3
82.5°	81.9	69.4	67.3	77.5	76.0	89.2	127.2	133.0	119.2	112.6	108.9
85°	22.7	25.6	42.4	60.7	59.2	69.4	102.3	107.5	95.8	78.9	76.8
87.5°	1.5	5.1	16.8	35.8	37.3	43.1	73.8	81.1	70.9	58.5	57.7
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)