

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: P401148

Luminaire Tested: **ENT-SA1B-740-U-T2**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401148
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-SA1B-740-U-T2
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3412 lumens
Efficiency: N/A
Efficacy: 134.3 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

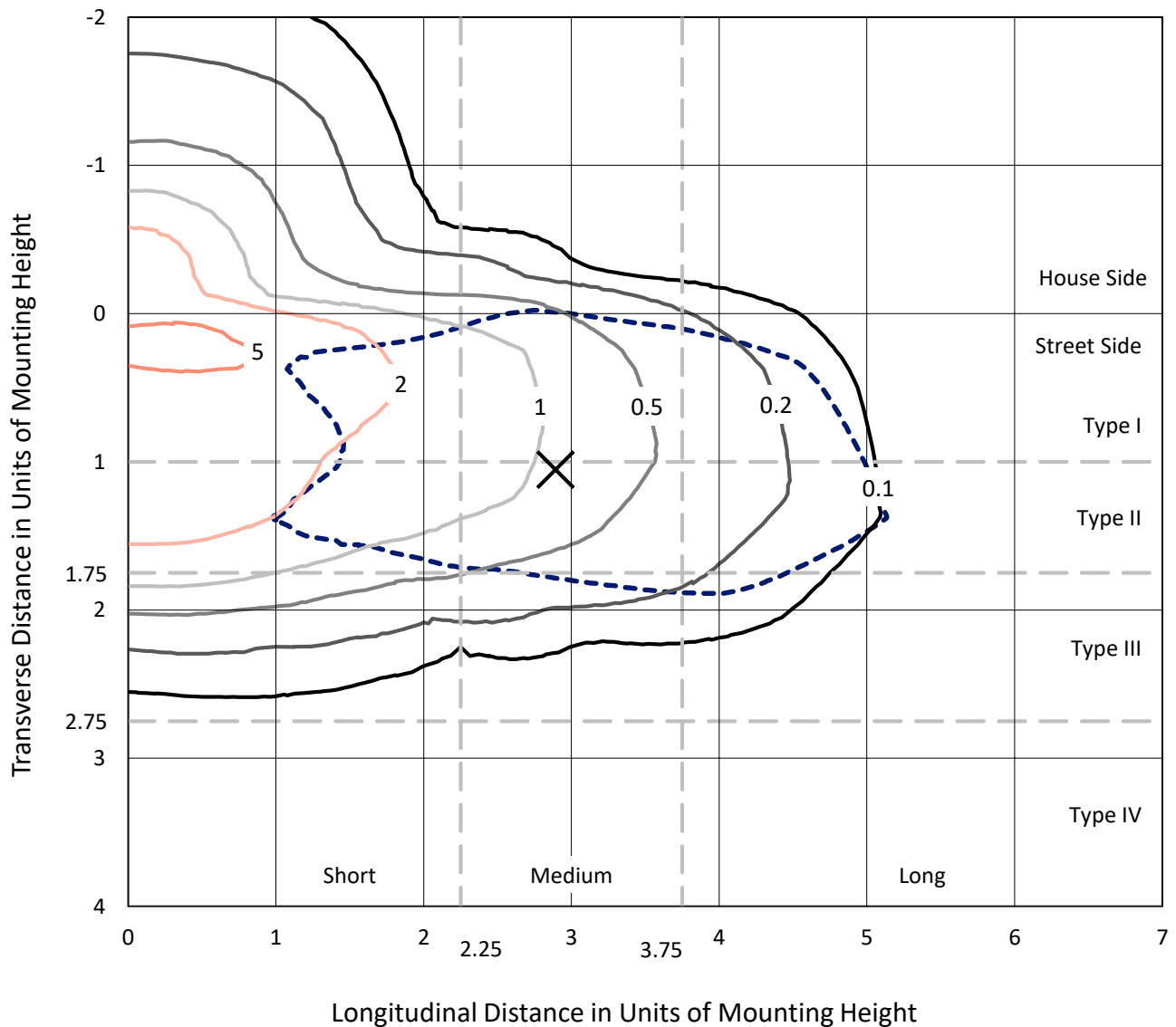
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

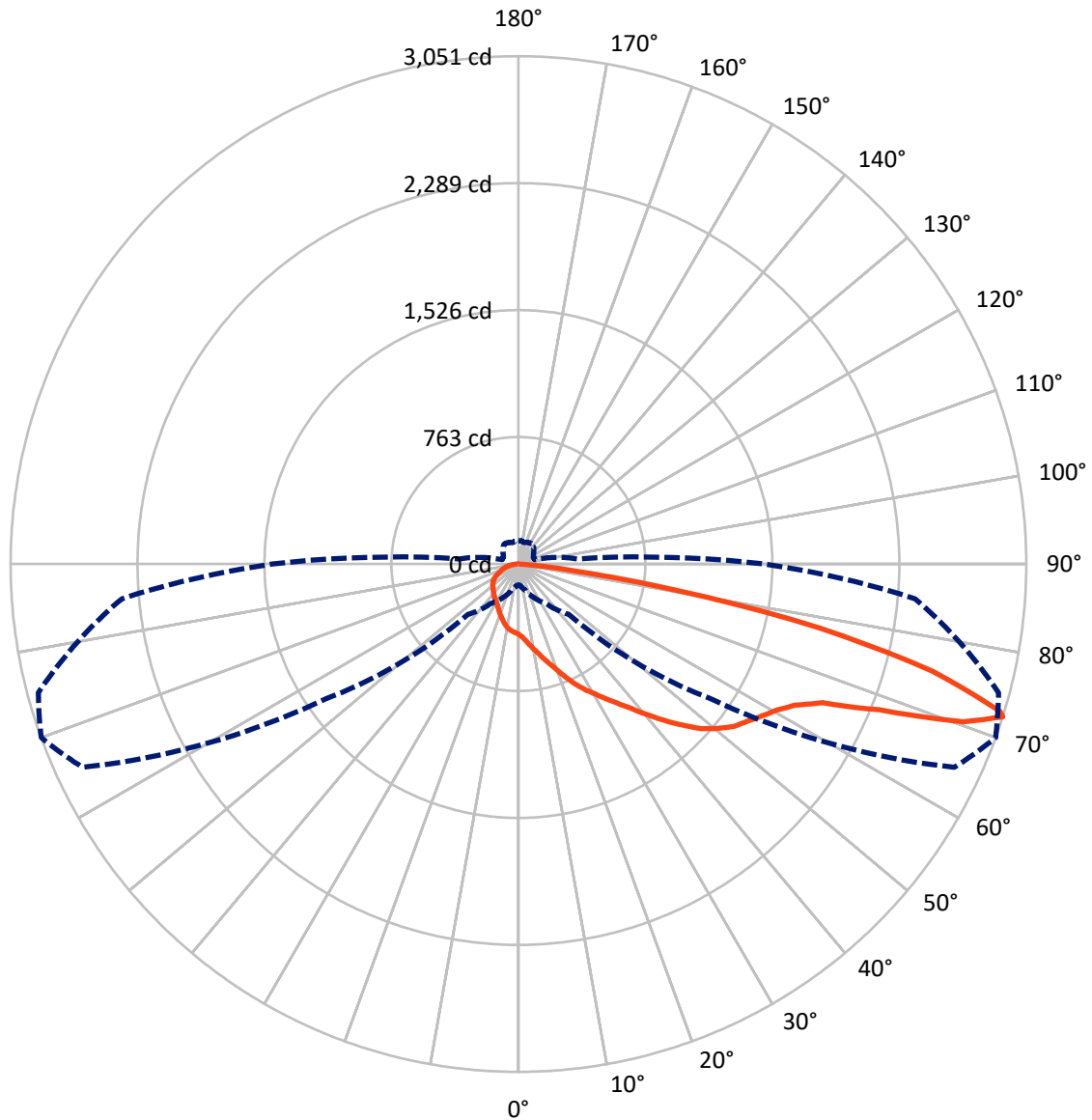
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 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	634.0	0.0	634.0
	% Fixture	18.6	0.0	18.6
Street Side	Lumens	2778.0	0.0	2778.0
	% Fixture	81.4	0.0	81.4
Total	Lumens	3412.0	0.0	3412.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.5	1.2
10°-20°	136.3	4.0
20°-30°	241.3	7.1
30°-40°	358.7	10.5
40°-50°	520.5	15.3
50°-60°	711.0	20.8
60°-70°	778.5	22.8
70°-80°	553.7	16.2
80°-90°	69.5	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°	3412.0	100.0
0°-180°	3412.0	100.0



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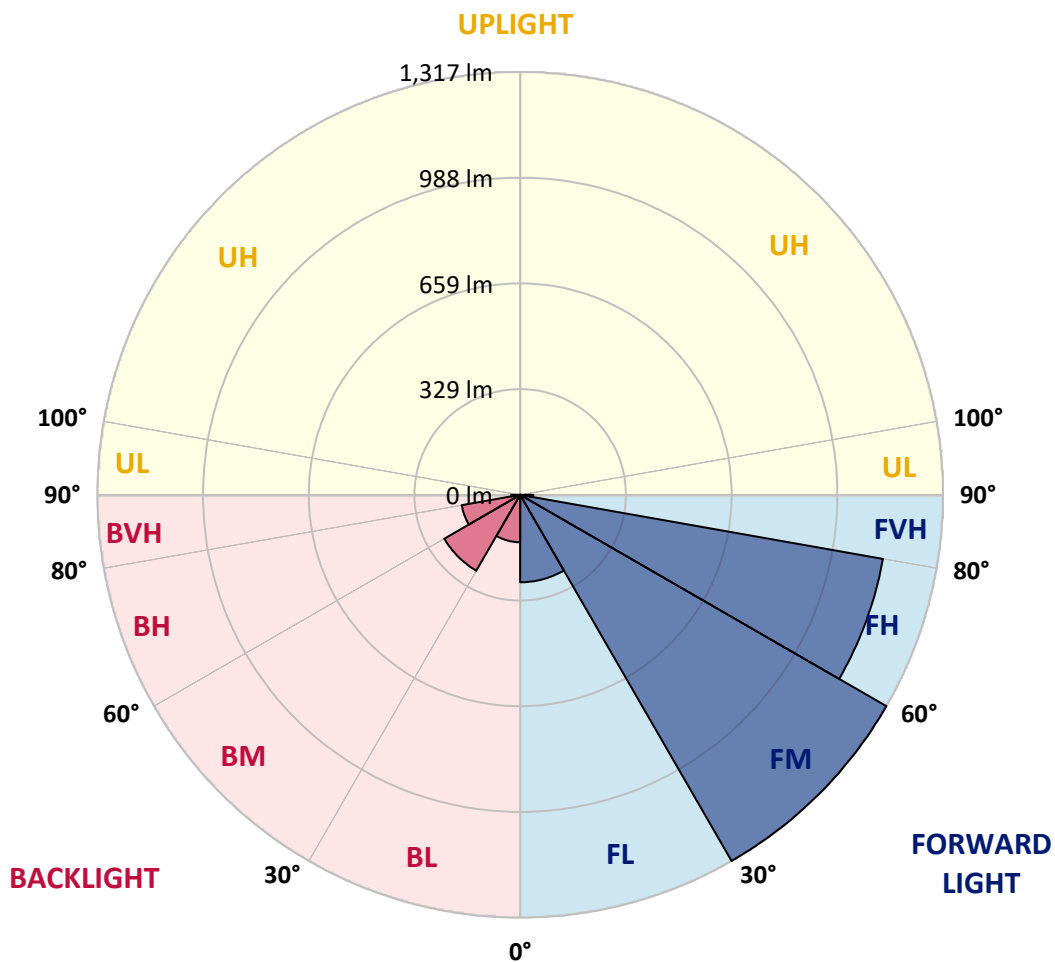
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	272.3	8.0			
FM	(30°-60°)	1317.2	38.6			
FH	(60°-80°)	1147.4	33.6			G1/1800
FVH	(80°-90°)	41.1	1.2			G1/100
BL	(0°-30°)	147.7	4.3	B1/500		
BM	(30°-60°)	273.0	8.0	B1/1000		
BH	(60°-80°)	184.8	5.4	B1/500		G1/500
BVH	(80°-90°)	28.5	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°	422.6	422.6	422.6	422.6	422.6	422.6	422.6	422.6	422.6	422.6	422.6
2.5°	469.8	467.4	467.9	463.5	461.1	455.2	448.9	442.0	438.6	436.2	427.9
5°	515.6	515.6	517.6	514.2	504.9	495.2	484.0	468.9	462.5	453.7	437.2
7.5°	553.7	554.6	554.6	553.7	545.4	534.6	520.0	501.5	491.3	478.6	452.8
10°	573.1	575.6	577.5	579.0	578.0	571.7	555.1	536.1	522.0	505.4	470.8
12.5°	582.9	583.9	587.3	594.6	600.4	605.3	593.1	570.7	556.6	536.6	490.3
15°	593.6	593.6	597.0	606.3	617.5	630.7	629.2	611.7	596.5	571.7	515.2
17.5°	600.4	602.4	608.7	618.5	634.1	656.0	667.2	657.5	638.0	611.7	542.0
20°	596.5	598.0	610.7	629.7	649.7	677.9	706.2	706.2	687.7	657.5	571.7
22.5°	603.9	606.3	615.1	633.1	660.4	696.9	743.2	759.3	743.2	710.1	606.3
25°	632.1	631.1	638.5	645.8	669.2	714.5	774.9	816.3	801.7	765.2	639.9
27.5°	673.1	673.1	677.0	676.5	684.8	729.1	802.7	866.5	854.4	810.5	667.7
30°	720.3	721.3	720.3	719.8	718.4	749.1	827.6	911.4	905.1	861.7	693.0
32.5°	777.8	780.3	776.4	766.6	760.8	777.8	848.5	961.6	963.5	912.4	717.9
35°	850.0	853.9	839.3	825.1	810.5	818.3	872.9	1008.9	1028.4	969.9	748.1
37.5°	922.1	928.4	926.0	888.0	867.5	867.0	908.9	1067.8	1100.5	1044.9	791.0
40°	983.0	988.4	991.3	956.7	928.4	927.5	962.1	1129.2	1189.2	1131.2	841.7
42.5°	1023.5	1028.4	1037.1	1016.7	990.3	1002.5	1020.6	1190.2	1284.7	1236.5	904.1
45°	1067.3	1071.2	1076.6	1064.9	1051.3	1086.4	1094.6	1257.9	1380.2	1349.5	977.2
47.5°	1114.1	1118.0	1121.0	1112.2	1107.3	1156.5	1167.3	1327.1	1476.7	1466.5	1048.3
50°	1165.8	1167.3	1170.2	1165.8	1167.3	1220.4	1227.2	1388.0	1553.3	1588.3	1122.4
52.5°	1254.5	1256.4	1257.4	1236.5	1229.2	1260.8	1275.5	1452.9	1620.5	1689.7	1187.7
55°	1324.7	1331.5	1362.2	1348.6	1331.0	1289.6	1315.4	1505.0	1668.3	1784.3	1256.0
57.5°	1267.2	1282.8	1359.3	1423.6	1472.8	1373.9	1362.7	1558.6	1723.3	1865.7	1335.4
60°	1100.0	1122.9	1234.0	1368.1	1527.4	1567.4	1459.7	1625.4	1783.3	1950.5	1420.7
62.5°	762.7	786.1	939.7	1153.6	1435.3	1678.0	1725.3	1743.8	1866.6	2037.2	1531.8
65°	365.5	389.4	516.1	741.8	1133.6	1606.9	2034.8	1989.5	2007.0	2147.4	1695.6
67.5°	232.5	245.1	294.9	404.0	659.4	1251.6	2145.9	2478.8	2339.4	2401.3	2021.6
70°	170.1	173.0	215.9	279.8	391.4	731.1	1894.9	2947.1	2838.0	2831.1	2414.9
72°	125.7	130.6	163.8	223.2	289.5	427.4	1410.0	2890.1	3051.4	2986.6	2391.5
72.5°	118.4	122.3	151.1	211.0	273.4	375.3	1263.3	2823.8	3025.1	2991.0	2346.7
75°	86.3	89.2	103.3	150.1	211.5	217.4	674.5	2167.3	2568.9	2855.5	2127.4
77.5°	59.5	61.4	68.7	92.1	144.7	147.2	286.1	1479.7	1854.0	2283.3	1636.1
80°	36.1	37.0	41.4	50.2	92.1	87.2	117.9	773.5	967.4	1241.3	758.8
82.5°	15.1	15.6	18.0	20.0	39.0	41.4	47.8	252.5	320.2	387.9	218.8
85°	0.0	0.0	0.5	0.5	1.0	4.4	6.8	31.2	47.3	56.5	39.5
87.5°	0.0	0.0	0.5	0.5	0.5	1.0	1.0	1.5	1.9	1.9	2.9
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°	422.6	422.6	422.6	422.6	422.6	422.6	422.6	422.6	422.6	422.6	422.6
2.5°	424.0	422.1	416.2	411.3	407.4	401.1	400.6	395.7	395.7	394.3	393.3
5°	430.8	424.5	412.8	402.1	394.3	385.0	380.6	375.3	371.9	369.9	370.4
7.5°	439.6	428.9	408.9	390.9	376.3	364.6	357.7	353.3	350.9	349.9	349.9
10°	451.8	435.2	402.6	375.3	356.8	348.0	344.6	344.1	344.6	345.1	345.5
12.5°	465.4	439.6	390.9	356.8	342.1	338.7	340.7	345.1	349.0	350.4	350.4
15°	479.6	442.5	374.8	339.7	330.9	334.3	341.2	349.4	355.8	359.7	360.7
17.5°	494.2	443.0	357.7	324.1	321.2	330.0	342.1	355.3	365.5	371.9	372.8
20°	509.8	442.0	337.7	310.0	311.4	326.1	343.1	361.1	374.8	383.1	384.0
22.5°	526.8	438.1	318.3	296.3	303.1	322.2	342.1	363.1	377.7	387.5	389.4
25°	543.4	430.3	298.8	284.1	297.3	318.3	337.3	355.3	369.4	378.7	381.1
27.5°	552.2	413.8	280.2	274.9	292.9	312.4	326.1	338.2	346.0	351.9	354.3
30°	553.7	390.4	265.1	268.5	288.0	304.1	311.9	313.9	312.4	314.4	311.9
32.5°	550.7	365.0	252.9	263.7	280.2	292.4	294.4	288.5	279.8	267.6	268.1
35°	548.8	337.3	243.2	256.8	270.0	277.8	274.4	265.1	248.6	233.9	233.0
37.5°	552.2	311.9	234.9	248.1	256.8	260.3	255.4	243.2	228.6	215.9	214.4
40°	561.9	293.4	227.1	238.3	242.7	245.1	239.3	228.6	222.7	213.5	212.0
42.5°	580.9	280.7	219.8	227.6	229.6	232.0	226.1	218.8	224.2	222.2	222.2
45°	607.3	274.9	213.5	217.4	219.3	223.2	219.8	213.5	219.3	208.1	206.2
47.5°	641.4	276.8	209.1	207.1	213.0	219.8	215.9	208.1	206.2	186.2	182.8
50°	677.4	287.1	204.7	198.8	206.2	215.4	210.5	198.4	186.7	176.4	174.5
52.5°	719.8	304.1	200.8	189.6	198.4	210.5	207.1	194.0	181.8	174.5	173.0
55°	766.6	320.7	195.9	178.9	188.1	209.1	208.1	191.0	175.0	171.6	170.6
57.5°	819.3	334.3	190.1	166.7	177.9	204.7	203.7	184.2	173.0	170.1	169.6
60°	885.1	350.4	179.8	152.5	167.7	196.4	195.4	180.8	168.6	166.2	165.2
62.5°	974.7	380.2	162.3	139.4	156.9	181.8	187.6	174.0	162.3	161.8	161.8
65°	1122.4	437.7	144.3	128.2	144.7	167.7	177.4	166.2	156.4	158.9	158.9
67.5°	1401.7	515.2	125.7	117.5	133.1	154.0	168.6	158.4	150.1	155.0	155.0
70°	1617.1	486.4	111.1	107.2	121.4	141.8	157.4	150.1	142.3	150.6	149.6
72°	1475.3	356.3	101.4	98.9	111.6	131.6	147.7	142.3	134.0	140.9	138.9
72.5°	1416.3	323.6	98.4	96.5	108.7	129.6	145.7	140.4	131.6	138.4	135.5
75°	1235.5	272.9	85.8	84.8	96.5	116.5	133.1	130.1	121.4	125.3	122.3
77.5°	1022.5	230.0	72.1	74.1	82.4	103.8	119.9	117.0	108.7	108.2	107.7
80°	479.6	128.2	59.5	60.9	69.2	88.7	103.3	101.4	93.6	92.6	91.1
82.5°	138.9	61.4	45.8	46.8	55.6	72.6	88.7	87.7	81.9	80.4	77.0
85°	25.8	20.0	24.9	29.2	40.5	60.4	80.9	79.0	70.2	63.8	59.0
87.5°	1.5	3.9	8.3	14.1	25.8	45.3	65.3	63.8	56.0	48.2	48.7
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)