

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: P401410

Luminaire Tested: **ENV-SA1C-830-U-T4FT**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401410
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1C-830-U-T4FT
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3432 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

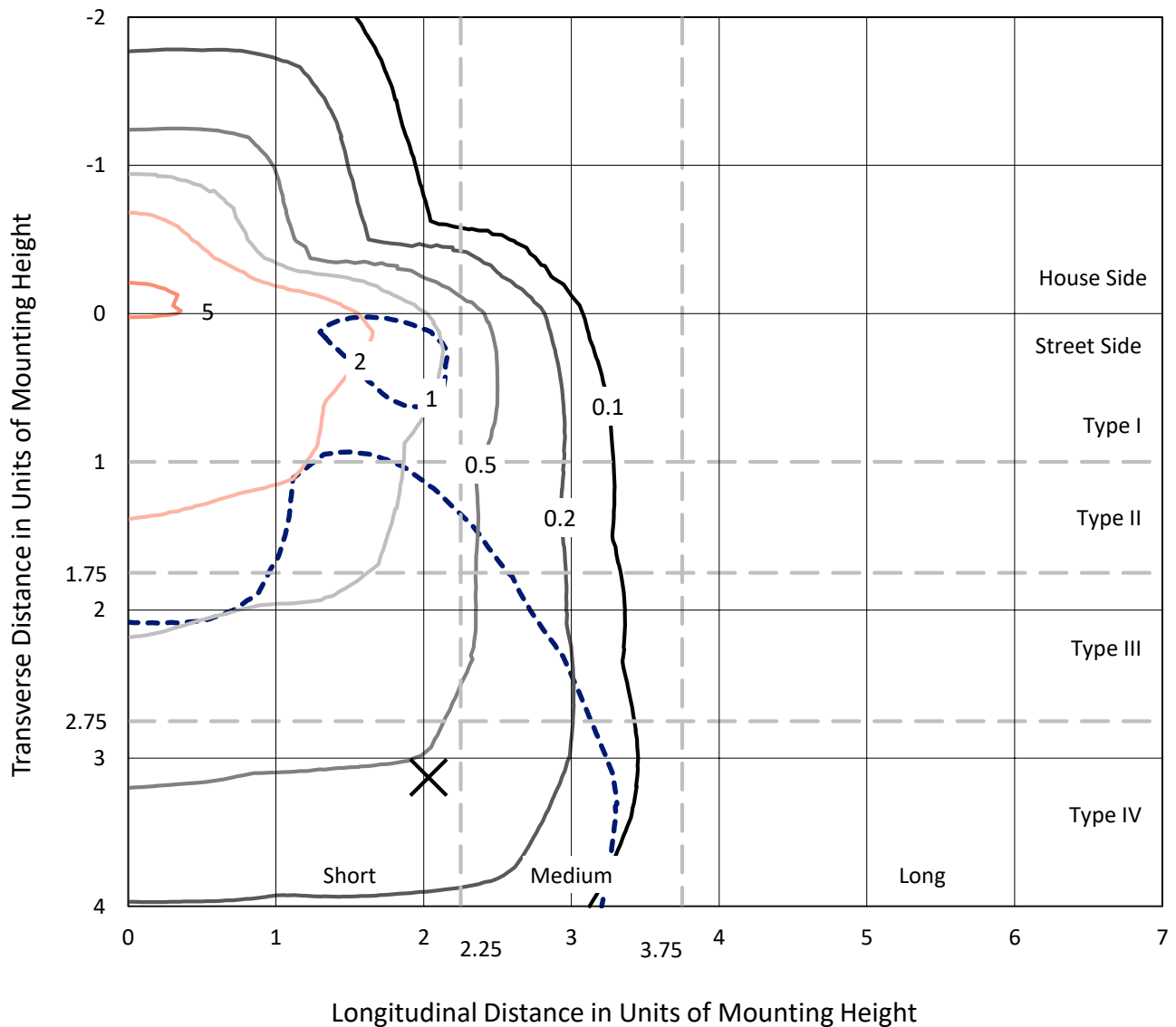
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

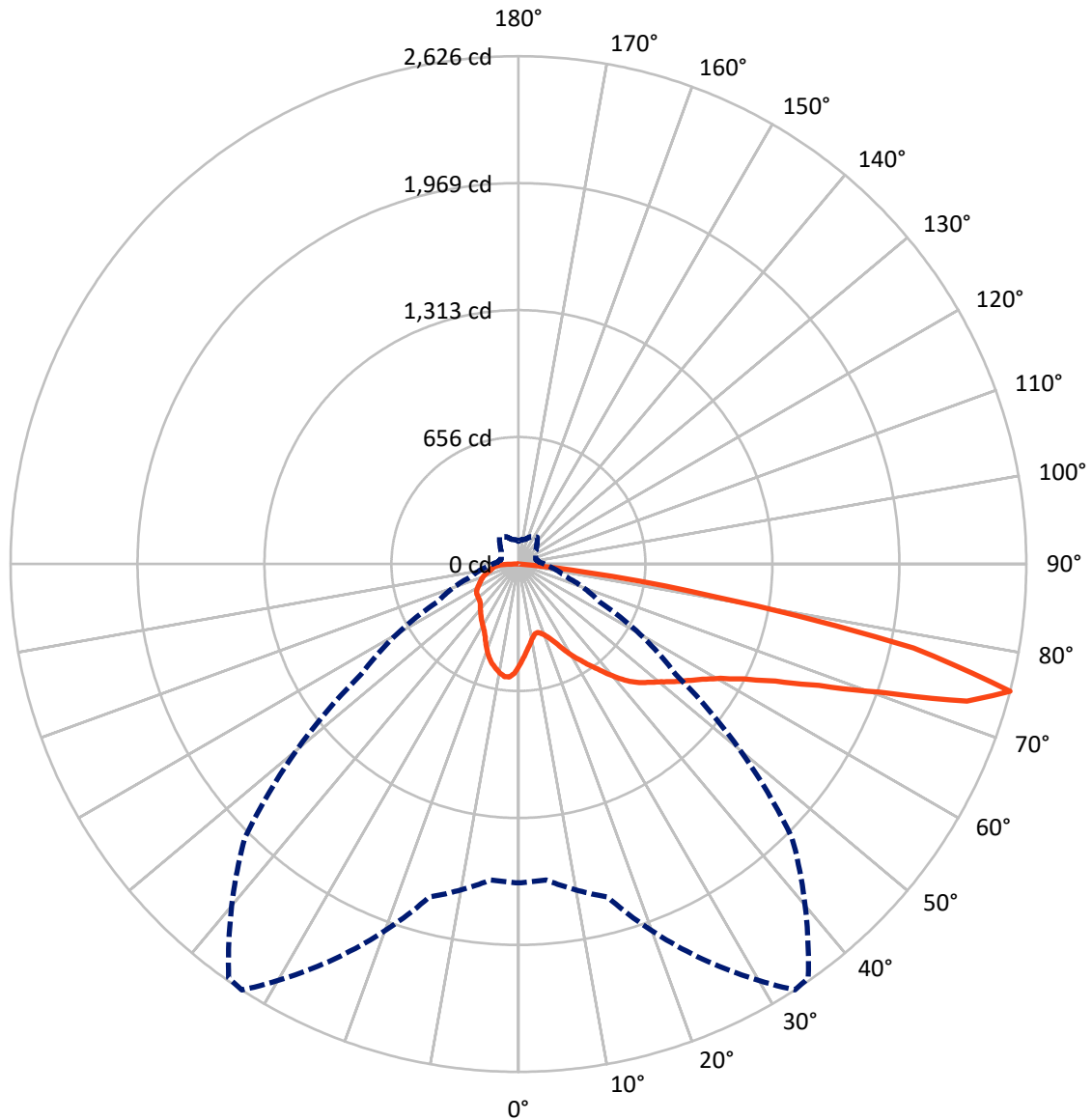
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	833.7	0.0	833.7
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	2598.3	0.0	2598.3
	% Fixture	75.7	0.0	75.7
Total	Lumens	3432.0	0.0	3432.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	1.4
10°-20°	138.2	4.0
20°-30°	229.7	6.7
30°-40°	342.8	10.0
40°-50°	478.8	14.0
50°-60°	639.1	18.6
60°-70°	792.5	23.1
70°-80°	685.2	20.0
80°-90°	76.6	2.2
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°	3432.0	100.0
0°-180°	3432.0	100.0



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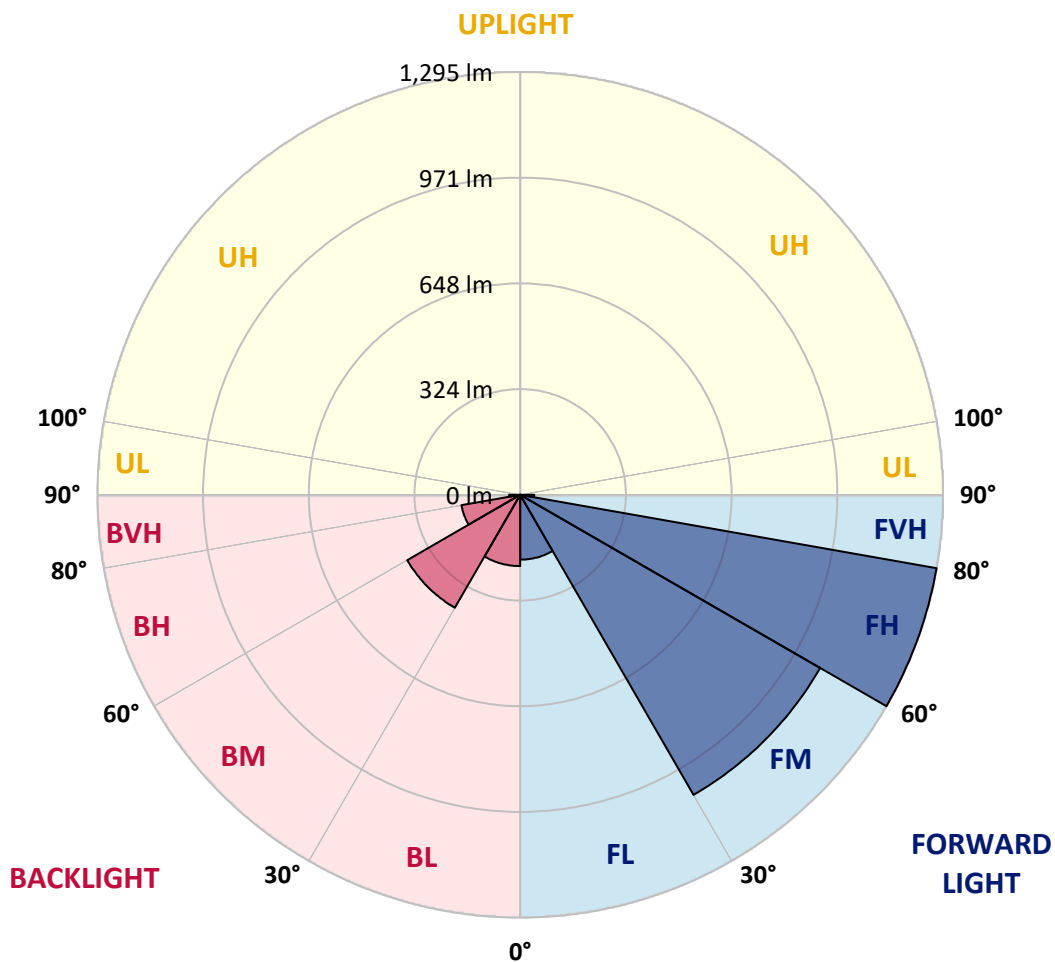
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	198.7	5.8			
FM	(30°-60°)	1061.2	30.9			
FH	(60°-80°)	1295.1	37.7			G1/1800
FVH	(80°-90°)	43.3	1.3			G1/100
BL	(0°-30°)	218.3	6.4	B1/500		
BM	(30°-60°)	399.5	11.6	B1/1000		
BH	(60°-80°)	182.6	5.3	B1/500		G1/500
BVH	(80°-90°)	33.3	1.0			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	525.9	525.9	525.9	525.9	525.9	525.9	525.9	525.9	525.9	525.9	525.9
2.5°	477.0	478.0	481.0	484.6	486.6	486.6	492.3	498.9	507.0	514.2	521.8
5°	437.2	438.7	441.3	445.9	451.5	452.5	463.7	475.4	490.2	506.0	521.3
7.5°	398.0	401.0	406.1	412.2	420.9	423.0	438.7	454.5	474.9	498.9	523.8
10°	367.9	370.0	372.5	381.2	391.9	395.4	416.3	436.2	464.2	493.8	526.9
12.5°	359.8	359.8	359.8	363.8	372.5	375.6	397.5	423.0	454.5	490.2	531.5
15°	371.5	371.0	365.4	362.3	367.4	370.0	388.8	413.8	449.4	491.2	540.2
17.5°	398.0	396.5	383.2	373.0	376.6	378.1	390.3	411.7	447.9	495.3	552.9
20°	432.6	429.1	408.7	393.4	392.9	393.9	403.1	417.9	450.5	502.4	566.7
22.5°	478.5	476.5	446.4	423.0	418.9	418.9	423.0	432.1	457.1	510.6	585.5
25°	537.6	532.0	495.8	464.2	455.1	452.5	452.0	452.0	468.8	522.8	608.9
27.5°	598.2	591.6	554.9	512.1	499.9	495.3	487.2	481.0	484.1	536.1	637.0
30°	652.8	643.6	612.5	568.2	549.8	542.7	527.9	515.2	507.0	554.4	674.2
32.5°	682.8	679.3	657.9	617.6	596.7	593.7	569.2	552.4	538.1	578.4	724.1
35°	723.1	718.5	704.7	671.6	646.7	639.0	620.7	600.8	577.9	610.5	787.3
37.5°	760.3	757.7	752.6	729.7	703.2	695.6	678.8	657.9	626.8	657.9	858.1
40°	798.0	794.9	792.9	784.8	765.9	760.8	752.6	728.2	686.4	709.8	927.9
42.5°	853.0	846.4	825.0	824.5	826.0	830.1	830.6	803.6	751.6	774.6	989.1
45°	924.9	906.5	858.6	857.1	874.9	885.6	911.6	888.7	819.4	840.8	1057.4
47.5°	961.6	942.7	893.3	890.2	913.7	929.5	993.7	971.3	889.7	915.2	1128.2
50°	979.4	967.2	923.9	933.5	957.5	972.8	1071.6	1053.8	962.6	995.7	1217.4
52.5°	1004.4	984.0	953.4	973.8	1009.5	1025.3	1141.5	1138.4	1024.3	1083.4	1315.2
55°	995.7	985.0	990.6	1018.1	1063.0	1086.4	1211.8	1211.8	1086.9	1177.1	1412.0
57.5°	1002.9	995.7	1042.1	1066.5	1123.1	1156.7	1296.4	1273.9	1139.9	1255.6	1477.3
60°	1063.5	1043.1	1079.3	1127.7	1200.6	1233.2	1393.2	1339.2	1183.2	1323.4	1489.0
62.5°	1170.5	1154.2	1157.8	1213.3	1307.6	1345.3	1489.0	1396.8	1212.3	1351.9	1445.2
65°	1347.8	1340.2	1296.4	1330.0	1459.9	1494.1	1608.7	1446.7	1204.1	1330.5	1329.5
67.5°	1586.3	1555.7	1496.6	1526.7	1676.5	1711.2	1753.0	1465.5	1151.1	1202.6	1068.6
70°	1784.0	1758.6	1731.5	1810.5	1982.8	2001.6	1903.3	1447.7	1022.2	941.2	716.5
72.5°	1909.9	1891.6	1916.5	2148.9	2424.6	2388.9	2051.6	1322.9	797.5	576.3	358.2
75°	1648.5	1639.8	1782.5	2253.9	2625.9	2612.6	2000.1	990.1	462.7	253.8	163.1
77.5°	829.1	923.4	1073.7	1599.1	2089.3	2091.8	1457.4	475.9	194.7	142.2	112.1
80°	233.4	236.4	358.2	659.4	1043.1	1111.4	551.4	161.5	111.1	106.0	83.6
82.5°	55.5	51.5	91.7	195.2	350.1	364.3	165.6	58.1	62.2	66.2	51.5
85°	0.5	0.5	0.5	0.5	0.5	1.0	6.1	6.1	14.8	18.9	14.8
87.5°	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
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°	525.9	525.9	525.9	525.9	525.9	525.9	525.9	525.9	525.9	525.9	525.9
2.5°	525.4	530.5	538.6	545.8	551.9	556.5	563.6	564.6	566.7	567.7	568.7
5°	530.0	539.6	554.9	568.2	577.4	579.9	586.0	585.5	586.0	586.0	585.5
7.5°	536.1	549.3	570.7	585.5	590.6	589.1	587.5	581.9	577.4	575.3	572.8
10°	543.7	559.0	584.0	594.7	592.1	584.0	574.3	564.1	556.0	551.9	550.9
12.5°	551.4	571.2	594.7	597.7	587.5	572.8	556.5	545.2	534.5	528.9	528.9
15°	564.1	586.0	603.3	597.2	578.9	560.0	537.6	522.3	510.1	502.4	501.9
17.5°	579.4	602.8	612.5	594.7	568.2	541.7	514.7	494.8	479.0	471.4	466.8
20°	598.2	620.2	617.1	586.5	552.4	519.8	486.1	462.2	445.9	437.7	436.2
22.5°	619.6	638.0	618.6	573.3	531.0	489.2	452.5	428.6	417.9	411.7	412.2
25°	645.6	659.9	619.1	557.5	500.4	448.9	416.8	405.6	404.1	401.5	402.6
27.5°	678.2	682.8	617.1	536.1	461.2	406.6	387.8	392.4	396.5	394.9	395.9
30°	717.0	710.4	612.5	505.0	412.8	367.9	368.9	379.1	384.7	383.2	383.7
32.5°	762.3	737.9	603.9	467.3	366.9	344.5	352.6	362.8	368.4	368.4	368.9
35°	813.3	771.0	587.0	418.4	334.8	330.2	337.3	345.5	349.1	347.0	348.6
37.5°	866.8	799.5	560.0	363.8	310.8	319.0	323.1	325.1	324.6	321.5	320.0
40°	916.7	822.0	511.6	309.8	291.0	307.3	309.3	303.7	297.1	291.5	287.9
42.5°	955.0	833.7	444.4	270.6	272.1	294.0	295.6	284.3	271.6	262.9	260.9
45°	994.2	837.7	377.6	239.0	251.7	280.8	284.9	269.6	252.2	242.0	240.5
47.5°	1039.0	847.9	311.9	217.1	234.4	271.6	278.2	259.4	240.0	224.7	222.2
50°	1099.2	867.3	262.4	200.3	222.2	267.0	276.2	251.2	226.8	209.9	207.9
52.5°	1175.6	895.8	216.6	187.0	212.5	259.9	273.1	243.1	217.1	196.7	193.6
55°	1241.3	906.5	187.0	175.8	202.3	251.2	270.6	240.0	206.4	183.4	179.9
57.5°	1271.4	876.0	166.1	164.6	191.6	240.5	265.5	229.8	194.7	176.8	173.8
60°	1257.6	800.0	150.3	154.4	179.4	226.8	252.2	219.6	186.5	171.7	168.7
62.5°	1196.5	712.4	138.6	144.7	165.6	209.4	237.0	210.5	179.4	166.1	162.0
65°	1089.0	616.1	129.9	136.1	153.4	192.6	224.7	199.8	171.2	158.0	154.4
67.5°	888.7	490.2	120.8	127.4	143.2	178.9	213.5	191.1	162.0	153.4	150.3
70°	588.1	329.7	112.1	118.7	133.0	165.6	201.8	181.9	153.4	147.8	143.7
72.5°	270.1	177.3	102.9	109.6	121.3	150.8	187.0	168.2	141.7	138.1	132.0
75°	133.5	109.0	91.7	97.8	107.0	133.0	169.7	156.4	131.0	124.8	117.7
77.5°	97.3	81.5	79.0	85.1	92.7	117.7	151.3	144.2	120.3	111.6	107.5
80°	72.4	63.2	66.2	72.4	79.5	106.5	141.7	135.0	111.1	102.4	99.4
82.5°	44.3	42.3	51.0	58.1	66.8	97.8	135.0	123.3	99.9	91.7	88.2
85°	12.7	15.3	26.0	37.7	47.4	79.0	125.9	108.0	84.1	70.3	67.8
87.5°	0.0	1.5	8.2	17.3	28.0	52.5	96.8	84.6	64.2	52.0	49.9
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)