

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: P401122

Luminaire Tested: **ENT-SA1B-735-U-T4FT**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401122
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: ENT-SA1B-735-U-T4FT
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3083 lumens
Efficiency: N/A
Efficacy: 121.4 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

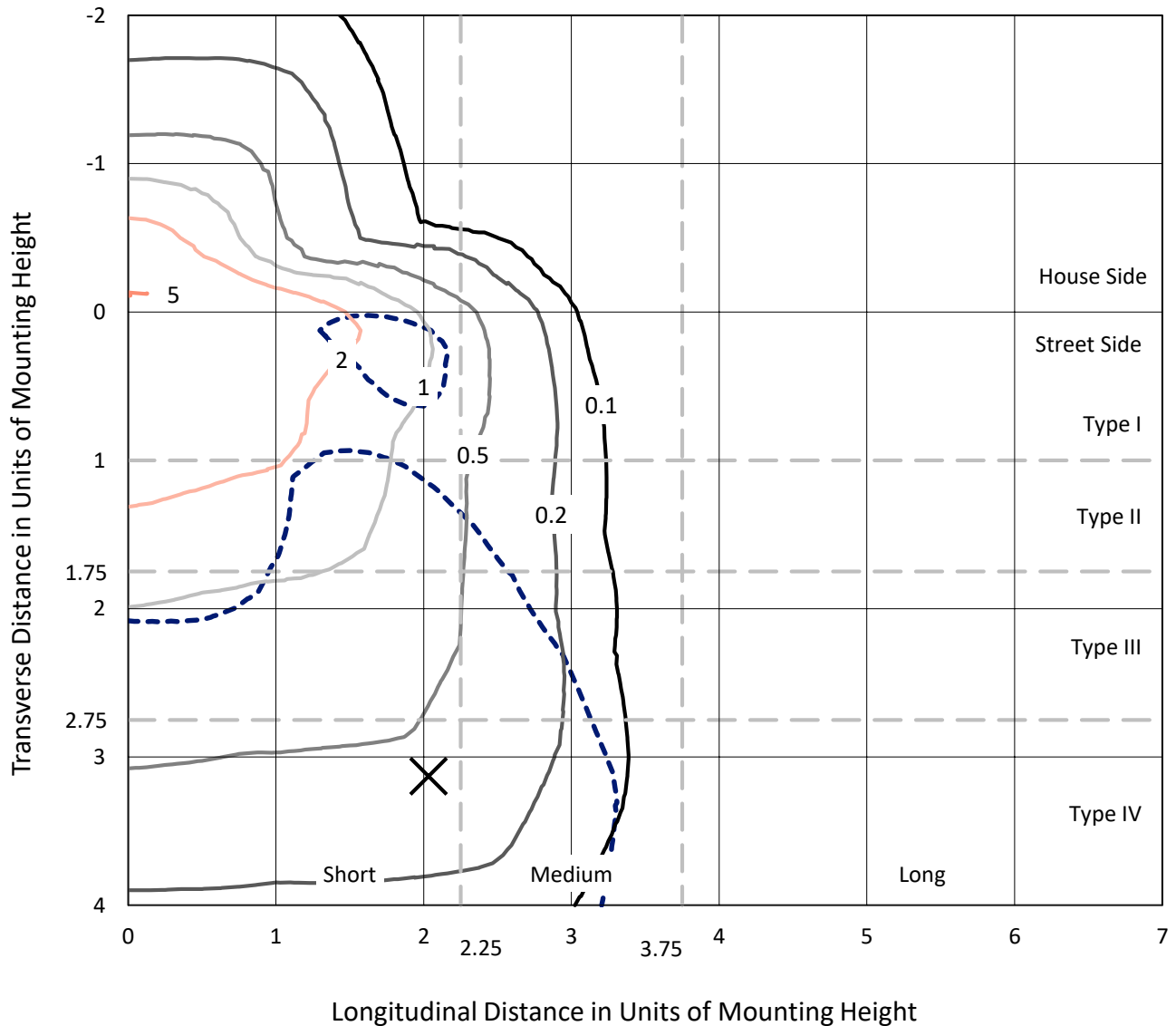
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

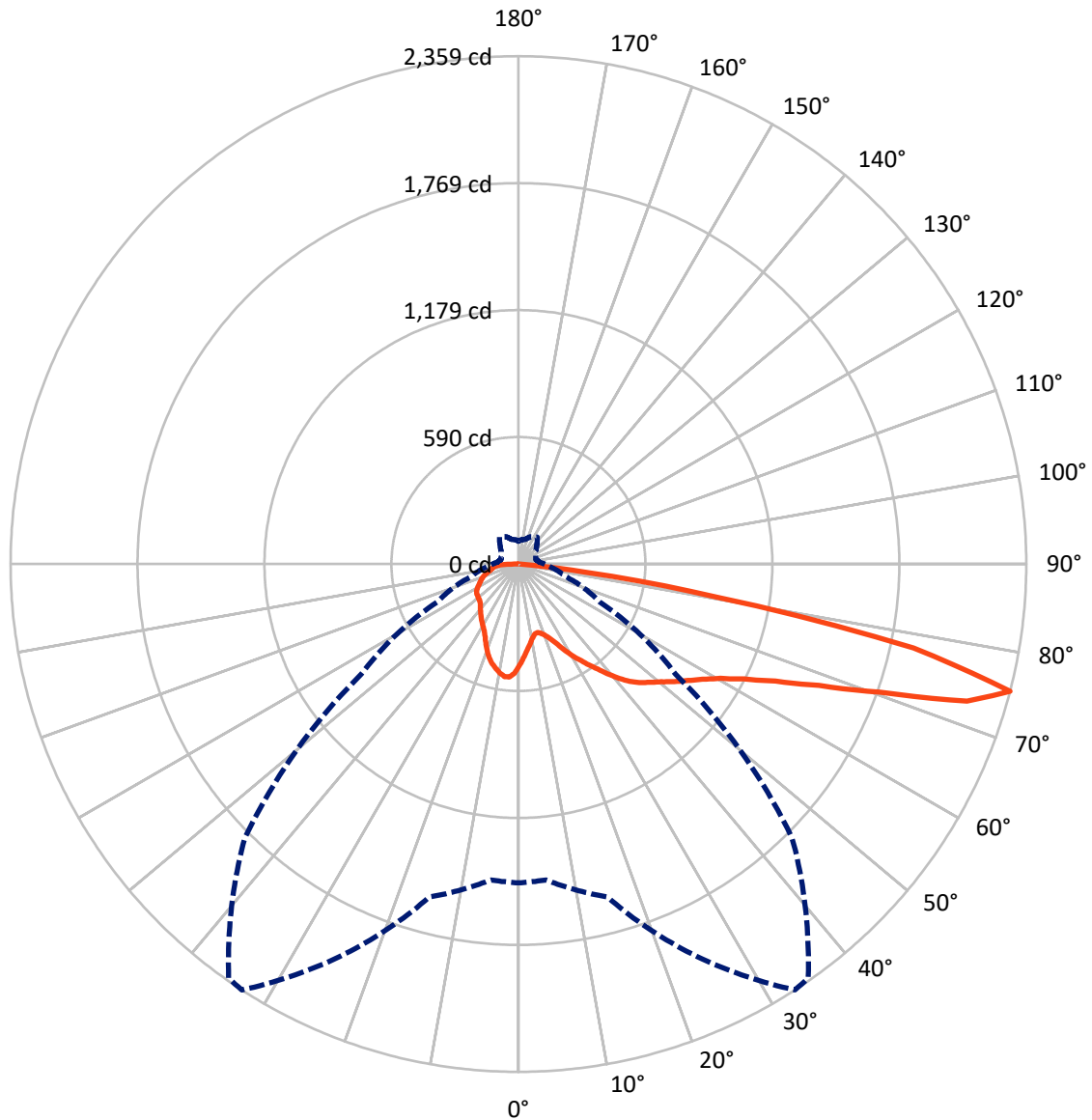
× Max cd
- - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5 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	748.9	0.0	748.9
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	2334.1	0.0	2334.1
	% Fixture	75.7	0.0	75.7
Total	Lumens	3083.0	0.0	3083.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.1	1.4
10°-20°	124.1	4.0
20°-30°	206.4	6.7
30°-40°	307.9	10.0
40°-50°	430.1	14.0
50°-60°	574.1	18.6
60°-70°	711.9	23.1
70°-80°	615.5	20.0
80°-90°	68.8	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°	3083.0	100.0
0°-180°	3083.0	100.0



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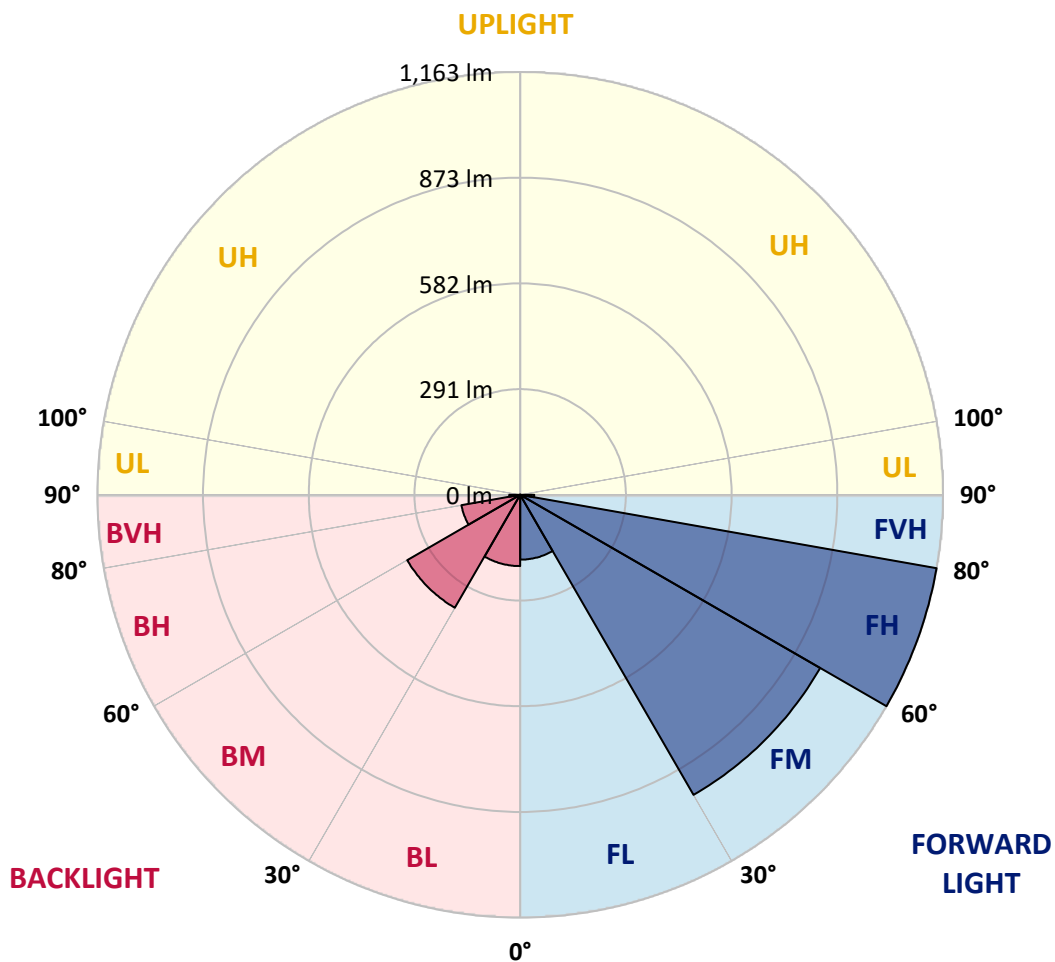
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	178.5	5.8			
FM	(30°-60°)	953.3	30.9			
FH	(60°-80°)	1163.4	37.7			G1/1800
FVH	(80°-90°)	38.9	1.3			G1/100
BL	(0°-30°)	196.1	6.4	B1/500		
BM	(30°-60°)	358.9	11.6	B1/1000		
BH	(60°-80°)	164.0	5.3	B1/500		G1/500
BVH	(80°-90°)	29.9	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°	472.4	472.4	472.4	472.4	472.4	472.4	472.4	472.4	472.4	472.4	472.4
2.5°	428.5	429.4	432.1	435.3	437.2	437.2	442.2	448.1	455.5	461.9	468.7
5°	392.8	394.1	396.4	400.5	405.6	406.5	416.6	427.1	440.4	454.6	468.3
7.5°	357.5	360.3	364.8	370.3	378.1	379.9	394.1	408.3	426.6	448.1	470.6
10°	330.5	332.3	334.6	342.4	352.0	355.2	374.0	391.8	417.0	443.6	473.3
12.5°	323.2	323.2	323.2	326.8	334.6	337.4	357.1	379.9	408.3	440.4	477.4
15°	333.7	333.2	328.2	325.5	330.0	332.3	349.3	371.7	403.7	441.3	485.2
17.5°	357.5	356.1	344.2	335.1	338.3	339.7	350.6	369.9	402.4	444.9	496.7
20°	388.6	385.4	367.1	353.4	352.9	353.8	362.1	375.4	404.7	451.4	509.0
22.5°	429.8	428.0	401.0	379.9	376.3	376.3	379.9	388.2	410.6	458.7	526.0
25°	482.9	477.9	445.4	417.0	408.8	406.5	406.0	406.0	421.1	469.7	547.0
27.5°	537.4	531.5	498.5	460.0	449.1	444.9	437.6	432.1	434.9	481.6	572.2
30°	586.4	578.2	550.2	510.4	493.9	487.5	474.2	462.8	455.5	498.0	605.6
32.5°	613.4	610.2	591.0	554.8	536.0	533.3	511.3	496.2	483.4	519.6	650.5
35°	649.6	645.4	633.1	603.3	580.9	574.0	557.6	539.7	519.1	548.4	707.2
37.5°	683.0	680.7	676.1	655.5	631.7	624.8	609.7	591.0	563.0	591.0	770.9
40°	716.9	714.1	712.3	704.9	688.0	683.4	676.1	654.1	616.6	637.7	833.6
42.5°	766.3	760.3	741.1	740.7	742.0	745.7	746.1	721.9	675.2	695.8	888.5
45°	830.8	814.4	771.3	770.0	786.0	795.6	818.9	798.3	736.1	755.3	949.9
47.5°	863.8	846.9	802.5	799.7	820.8	835.0	892.6	872.5	799.2	822.1	1013.5
50°	879.8	868.8	829.9	838.6	860.1	873.9	962.7	946.6	864.7	894.5	1093.6
52.5°	902.2	883.9	856.5	874.8	906.8	921.0	1025.4	1022.6	920.1	973.2	1181.5
55°	894.5	884.8	889.9	914.6	954.9	975.9	1088.6	1088.6	976.4	1057.4	1268.5
57.5°	900.9	894.5	936.1	958.1	1008.9	1039.1	1164.5	1144.4	1024.0	1127.9	1327.0
60°	955.3	937.0	969.5	1013.0	1078.5	1107.8	1251.5	1203.0	1062.9	1188.8	1337.6
62.5°	1051.5	1036.8	1040.0	1089.9	1174.6	1208.5	1337.6	1254.7	1089.0	1214.4	1298.2
65°	1210.8	1203.9	1164.5	1194.8	1311.5	1342.2	1445.1	1299.6	1081.7	1195.2	1194.3
67.5°	1425.0	1397.5	1344.4	1371.4	1506.0	1537.2	1574.7	1316.5	1034.1	1080.3	959.9
70°	1602.6	1579.7	1555.5	1626.4	1781.1	1798.1	1709.7	1300.5	918.3	845.5	643.6
72.5°	1715.7	1699.2	1721.6	1930.4	2178.0	2146.0	1842.9	1188.3	716.4	517.7	321.8
75°	1480.9	1473.1	1601.2	2024.7	2358.8	2346.9	1796.7	889.4	415.6	228.0	146.5
77.5°	744.8	829.5	964.5	1436.4	1876.8	1879.1	1309.2	427.5	174.9	127.7	100.7
80°	209.7	212.4	321.8	592.3	937.0	998.4	495.3	145.1	99.8	95.2	75.1
82.5°	49.9	46.2	82.4	175.3	314.5	327.3	148.8	52.2	55.8	59.5	46.2
85°	0.5	0.5	0.5	0.5	0.5	0.9	5.5	5.5	13.3	16.9	13.3
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°	472.4	472.4	472.4	472.4	472.4	472.4	472.4	472.4	472.4	472.4	472.4
2.5°	472.0	476.5	483.9	490.3	495.8	499.9	506.3	507.2	509.0	509.9	510.9
5°	476.1	484.8	498.5	510.4	518.6	520.9	526.4	526.0	526.4	526.4	526.0
7.5°	481.6	493.5	512.7	526.0	530.5	529.2	527.8	522.8	518.6	516.8	514.5
10°	488.4	502.2	524.6	534.2	531.9	524.6	515.9	506.7	499.4	495.8	494.8
12.5°	495.3	513.1	534.2	537.0	527.8	514.5	499.9	489.8	480.2	475.2	475.2
15°	506.7	526.4	542.0	536.5	520.0	503.1	482.9	469.2	458.2	451.4	450.9
17.5°	520.5	541.5	550.2	534.2	510.4	486.6	462.3	444.5	430.3	423.4	419.3
20°	537.4	557.1	554.3	526.9	496.2	466.9	436.7	415.2	400.5	393.2	391.8
22.5°	556.6	573.1	555.7	515.0	477.0	439.4	406.5	385.0	375.4	369.9	370.3
25°	580.0	592.8	556.2	500.8	449.5	403.3	374.4	364.4	363.0	360.7	361.6
27.5°	609.3	613.4	554.3	481.6	414.3	365.3	348.4	352.5	356.1	354.8	355.7
30°	644.1	638.1	550.2	453.6	370.8	330.5	331.4	340.6	345.6	344.2	344.7
32.5°	684.8	662.8	542.4	419.8	329.6	309.4	316.8	325.9	331.0	331.0	331.4
35°	730.6	692.6	527.3	375.8	300.7	296.6	303.0	310.4	313.6	311.7	313.1
37.5°	778.6	718.2	503.1	326.8	279.2	286.6	290.2	292.1	291.6	288.8	287.5
40°	823.5	738.4	459.6	278.3	261.4	276.0	277.9	272.8	266.9	261.8	258.6
42.5°	857.8	748.9	399.2	243.1	244.4	264.1	265.5	255.4	244.0	236.2	234.4
45°	893.1	752.6	339.2	214.7	226.1	252.2	255.9	242.2	226.6	217.4	216.1
47.5°	933.4	761.7	280.1	195.0	210.6	244.0	249.9	233.0	215.6	201.9	199.6
50°	987.4	779.1	235.7	179.9	199.6	239.9	248.1	225.7	203.7	188.6	186.8
52.5°	1056.1	804.7	194.5	168.0	190.9	233.5	245.4	218.4	195.0	176.7	173.9
55°	1115.1	814.4	168.0	157.9	181.7	225.7	243.1	215.6	185.4	164.8	161.6
57.5°	1142.1	786.9	149.2	147.9	172.1	216.1	238.5	206.4	174.9	158.8	156.1
60°	1129.8	718.7	135.0	138.7	161.1	203.7	226.6	197.3	167.5	154.3	151.5
62.5°	1074.8	639.9	124.5	130.0	148.8	188.1	212.9	189.1	161.1	149.2	145.6
65°	978.2	553.4	116.7	122.2	137.8	173.0	201.9	179.4	153.8	141.9	138.7
67.5°	798.3	440.4	108.5	114.4	128.6	160.7	191.8	171.7	145.6	137.8	135.0
70°	528.3	296.2	100.7	106.7	119.5	148.8	181.3	163.4	137.8	132.8	129.1
72.5°	242.6	159.3	92.5	98.4	108.9	135.5	168.0	151.1	127.3	124.1	118.6
75°	119.9	98.0	82.4	87.9	96.1	119.5	152.4	140.5	117.6	112.2	105.7
77.5°	87.4	73.2	71.0	76.4	83.3	105.7	136.0	129.5	108.0	100.2	96.6
80°	65.0	56.8	59.5	65.0	71.4	95.7	127.3	121.3	99.8	92.0	89.3
82.5°	39.8	38.0	45.8	52.2	60.0	87.9	121.3	110.8	89.7	82.4	79.2
85°	11.4	13.7	23.3	33.9	42.6	71.0	113.1	97.0	75.5	63.2	60.9
87.5°	0.0	1.4	7.3	15.6	25.2	47.1	87.0	76.0	57.7	46.7	44.9
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)