

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: P401643

Luminaire Tested: **ENT-SA1E-730-U-T4FT-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401643
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1E-730-U-T4FT-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4537 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

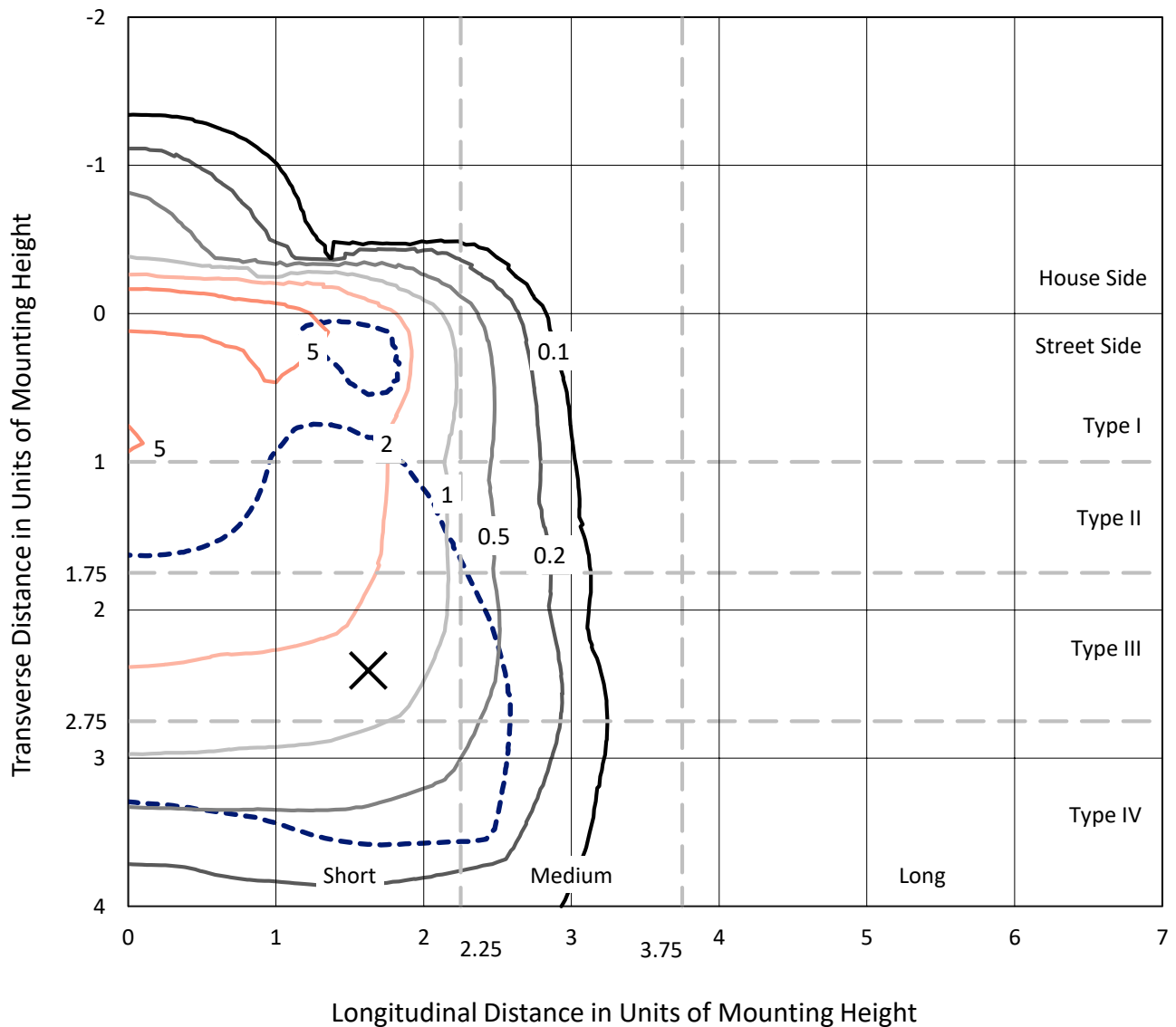
Input Watts (W): 57.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

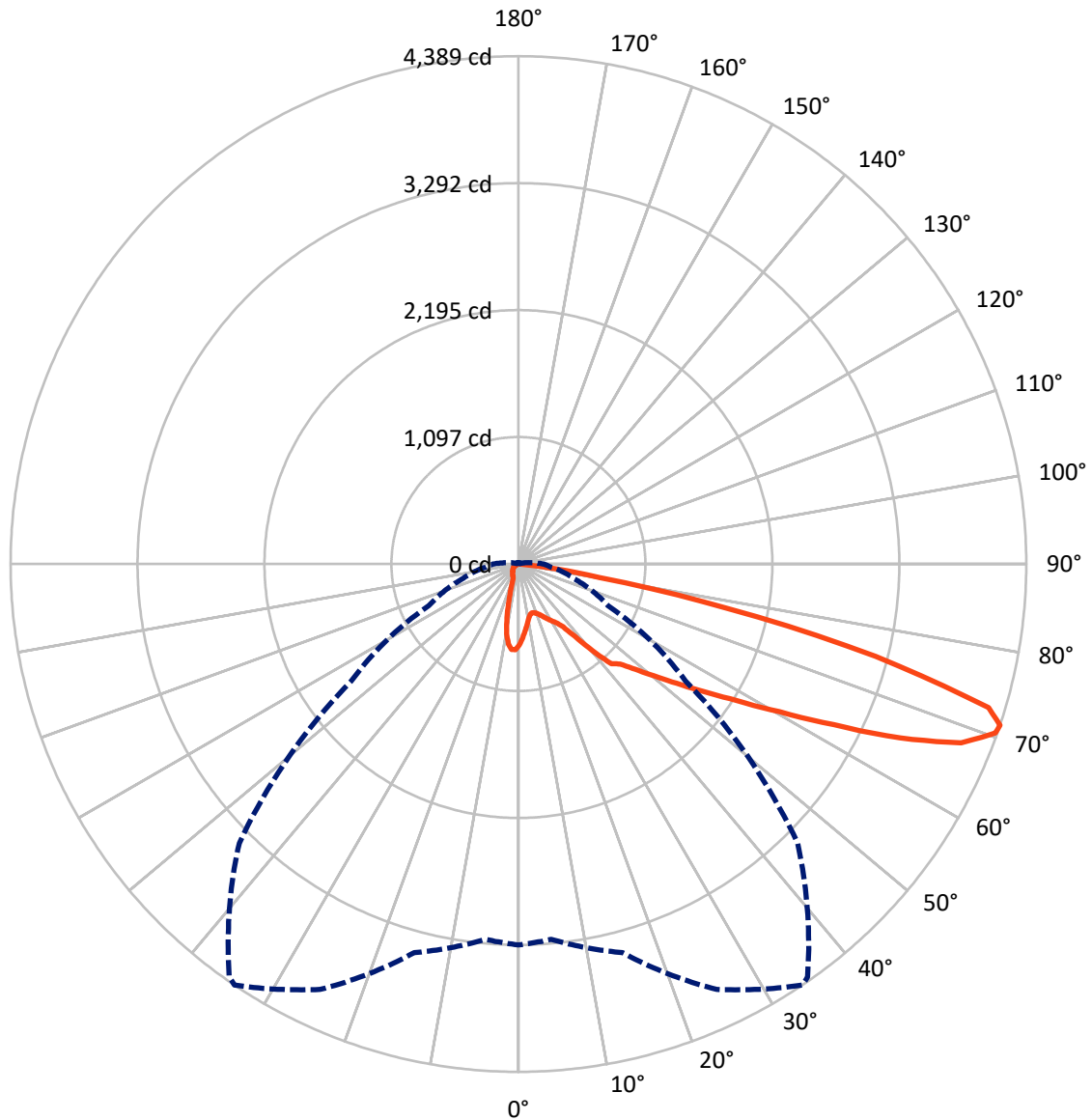
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	501.7	0.0	501.7
	% Fixture	11.1	0.0	11.1
Street Side	Lumens	4035.3	0.0	4035.3
	% Fixture	88.9	0.0	88.9
Total	Lumens	4537.0	0.0	4537.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	1.4
10°-20°	142.0	3.1
20°-30°	212.0	4.7
30°-40°	354.0	7.8
40°-50°	639.4	14.1
50°-60°	1014.5	22.4
60°-70°	1363.2	30.0
70°-80°	723.3	15.9
80°-90°	26.7	0.6
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°	4537.0	100.0
0°-180°	4537.0	100.0



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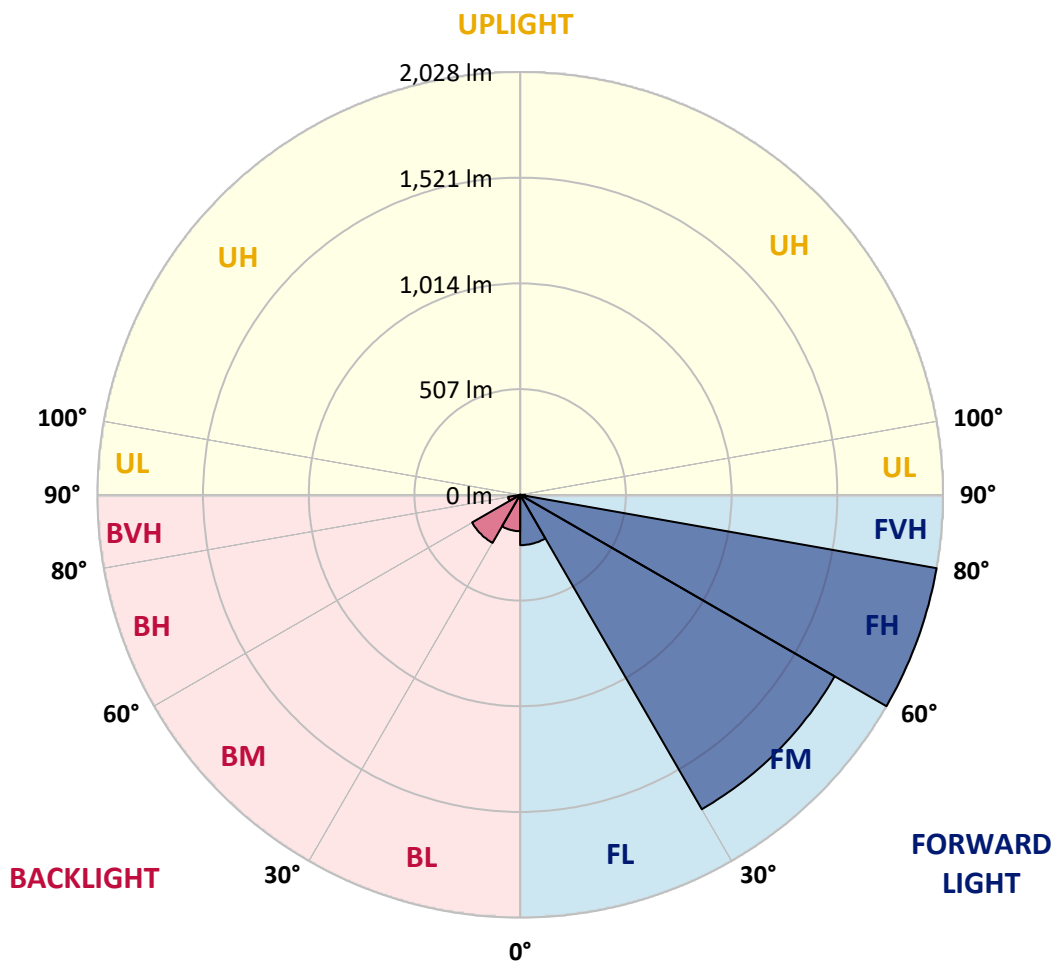
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	241.5	5.3			
FM	(30°-60°)	1741.6	38.4			
FH	(60°-80°)	2028.0	44.7			G2/5000
FVH	(80°-90°)	24.3	0.5			G1/100
BL	(0°-30°)	174.5	3.8	B1/500		
BM	(30°-60°)	266.2	5.9	B1/1000		
BH	(60°-80°)	58.6	1.3	B0/110		G0/110
BVH	(80°-90°)	2.4	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0
2.5°	640.2	632.0	639.2	642.9	645.6	649.3	654.7	664.7	675.7	688.4	695.7
5°	558.2	562.8	565.5	575.5	585.5	587.3	604.6	624.7	650.2	675.7	697.5
7.5°	491.7	491.7	499.9	515.4	531.8	533.6	563.7	590.1	626.5	665.6	701.2
10°	438.9	440.7	447.1	462.6	483.5	488.1	521.8	558.2	603.7	654.7	704.8
12.5°	421.6	420.7	419.8	430.7	448.0	452.6	489.9	533.6	587.3	649.3	713.9
15°	432.5	429.8	423.4	425.3	436.2	440.7	473.5	517.2	577.3	648.3	729.4
17.5°	449.8	446.2	434.4	430.7	442.6	447.1	474.4	512.7	573.7	652.9	747.6
20°	470.8	467.1	448.9	444.4	456.2	459.9	488.1	520.9	575.5	662.0	772.2
22.5°	500.8	496.3	469.9	464.4	476.2	479.9	509.9	540.0	586.4	678.4	805.9
25°	537.3	531.8	498.1	490.8	505.4	509.0	539.1	567.3	604.6	700.3	848.7
27.5°	577.3	570.9	535.4	520.9	537.3	542.7	570.9	601.9	631.0	727.6	905.1
30°	613.7	606.5	571.9	555.5	571.9	574.6	608.3	642.9	673.8	774.0	988.0
32.5°	714.8	696.6	642.9	595.5	606.5	611.9	652.9	707.5	754.0	829.6	1094.5
35°	866.0	851.4	785.8	703.9	665.6	667.5	720.3	789.5	810.4	894.2	1226.6
37.5°	1011.7	998.9	941.6	866.0	793.1	795.9	805.0	871.4	896.0	1006.2	1387.8
40°	1171.0	1151.0	1105.5	1033.5	983.4	971.6	927.0	973.4	1027.2	1147.4	1563.5
42.5°	1244.8	1225.7	1178.3	1182.9	1177.4	1156.5	1068.1	1132.8	1192.9	1352.2	1757.5
45°	1366.8	1329.5	1232.0	1239.3	1232.0	1233.9	1255.7	1349.5	1401.4	1569.0	1976.9
47.5°	1479.7	1436.9	1334.9	1327.7	1359.5	1375.9	1493.4	1607.2	1611.8	1757.5	2149.0
50°	1582.6	1551.7	1457.9	1458.8	1517.1	1535.3	1770.2	1874.0	1782.0	1902.2	2283.8
52.5°	1719.2	1675.5	1591.7	1621.8	1712.8	1729.2	2046.1	2108.0	1905.0	2033.4	2389.4
55°	1845.8	1822.1	1760.2	1804.8	1944.1	1986.9	2326.6	2288.3	1991.5	2149.9	2440.4
57.5°	2053.4	2030.6	2014.2	2037.0	2223.7	2277.4	2610.7	2415.8	2058.9	2227.3	2416.7
60°	2399.4	2376.7	2327.5	2348.4	2591.6	2618.9	2833.8	2545.1	2085.3	2249.2	2323.9
62.5°	2826.5	2798.3	2719.1	2815.6	3059.6	3058.7	3065.1	2613.4	2051.6	2184.5	2078.9
65°	3211.7	3172.5	3131.6	3328.2	3625.1	3584.1	3310.9	2621.6	1945.0	1872.2	1608.1
67.5°	3492.2	3476.7	3499.4	3806.3	4125.9	4085.0	3549.5	2508.7	1619.0	1351.3	993.5
70°	3481.2	3449.4	3594.1	4084.0	4374.5	4340.8	3539.5	2061.6	1080.0	715.7	416.1
71°	3292.7	3256.3	3476.7	4056.7	4389.1	4357.2	3412.0	1763.8	854.1	505.4	274.1
72.5°	2544.2	2654.4	3005.0	3764.4	4248.9	4207.9	3065.1	1350.4	540.9	292.3	137.5
75°	1076.3	1136.4	1783.9	2687.2	3187.1	3166.2	2066.2	623.8	248.6	132.0	52.8
77.5°	276.8	273.2	546.4	1152.8	1855.8	1888.6	952.5	214.0	129.3	93.8	30.0
80°	53.7	58.3	155.7	400.7	708.4	727.6	310.5	93.8	86.5	73.8	15.5
82.5°	5.5	6.4	27.3	123.8	237.7	229.5	68.3	35.5	52.8	50.1	7.3
85°	0.0	0.0	0.9	0.9	0.9	0.9	0.9	3.6	12.7	13.7	1.8
87.5°	0.0	0.0	0.9	0.9	0.0	0.0	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°	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0
2.5°	701.2	709.4	718.5	724.8	731.2	732.1	741.2	739.4	742.1	743.1	742.1
5°	709.4	720.3	737.6	746.7	750.3	744.0	742.1	732.1	728.5	723.9	719.4
7.5°	718.5	732.1	752.2	756.7	744.0	720.3	701.2	676.6	653.8	639.2	641.1
10°	728.5	745.8	762.2	750.3	717.6	671.1	617.4	562.8	514.5	496.3	502.7
12.5°	741.2	762.2	769.5	736.7	672.9	579.1	481.7	398.8	348.8	318.7	315.1
15°	760.4	781.3	773.1	714.8	601.9	455.3	334.2	250.4	202.2	186.7	178.5
17.5°	784.0	804.1	773.1	675.7	500.8	326.0	203.1	152.1	136.6	132.9	133.9
20°	813.2	832.3	769.5	616.5	386.1	200.3	135.7	125.7	125.7	125.7	124.8
22.5°	852.3	862.3	764.0	538.2	265.9	135.7	120.2	119.3	120.2	120.2	120.2
25°	899.7	897.9	754.0	444.4	167.6	115.6	114.7	114.7	115.6	116.6	116.6
27.5°	962.5	943.4	736.7	332.4	118.4	107.5	109.3	111.1	112.9	114.7	114.7
30°	1049.9	1003.5	708.4	224.9	100.2	99.3	102.9	108.4	111.1	112.9	112.9
32.5°	1143.7	1065.4	660.2	143.9	92.0	91.1	94.7	102.9	110.2	112.0	112.0
35°	1262.1	1131.9	588.2	103.8	86.5	84.7	88.3	95.6	106.5	112.0	112.0
37.5°	1386.8	1202.9	483.5	87.4	81.0	79.2	82.0	87.4	100.2	110.2	111.1
40°	1519.8	1265.7	363.3	81.0	75.6	74.7	75.6	81.0	91.1	104.7	107.5
42.5°	1653.7	1318.6	254.1	74.7	71.0	69.2	71.0	74.7	83.8	95.6	97.4
45°	1801.2	1376.8	169.4	69.2	67.4	65.6	67.4	70.1	76.5	82.9	83.8
47.5°	1908.6	1397.8	116.6	62.8	61.9	62.8	63.7	65.6	69.2	70.1	69.2
50°	1979.6	1386.8	83.8	56.5	57.4	60.1	60.1	61.0	61.0	58.3	57.4
52.5°	2031.6	1346.8	64.7	48.3	53.7	56.5	56.5	54.6	52.8	49.2	48.3
55°	2037.0	1256.6	51.0	41.9	48.3	52.8	51.9	48.3	44.6	41.0	41.0
57.5°	1967.8	1120.0	41.9	35.5	41.9	46.4	44.6	41.0	36.4	33.7	33.7
60°	1855.8	979.8	35.5	30.0	34.6	39.2	36.4	33.7	29.1	26.4	26.4
62.5°	1649.1	841.4	29.1	24.6	28.2	31.0	30.0	27.3	22.8	20.9	20.0
65°	1263.9	640.2	21.9	19.1	21.9	25.5	23.7	20.9	18.2	15.5	14.6
67.5°	759.4	385.2	17.3	14.6	17.3	20.0	18.2	15.5	12.7	10.9	10.9
70°	321.4	164.8	13.7	10.9	12.7	15.5	14.6	12.7	10.0	9.1	9.1
71°	218.5	117.5	11.8	10.0	11.8	14.6	13.7	11.8	10.0	9.1	9.1
72.5°	112.0	60.1	10.0	8.2	10.9	12.7	12.7	10.9	9.1	9.1	9.1
75°	40.1	25.5	8.2	7.3	9.1	9.1	10.0	10.0	10.0	10.0	9.1
77.5°	22.8	15.5	7.3	7.3	7.3	8.2	10.0	10.9	11.8	11.8	10.9
80°	12.7	8.2	4.6	5.5	7.3	8.2	10.0	10.9	12.7	12.7	11.8
82.5°	6.4	2.7	0.9	2.7	4.6	7.3	8.2	9.1	10.9	10.0	10.0
85°	0.9	0.0	0.0	0.9	2.7	3.6	5.5	7.3	9.1	9.1	8.2
87.5°	0.0	0.0	0.0	0.0	0.9	1.8	2.7	4.6	6.4	7.3	6.4
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)