

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: P401694

Luminaire Tested: **ENT-SA1E-740-U-T4FT-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401694
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-740-U-T4FT-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 4000K, 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: 4982 lumens
Efficiency: N/A
Efficacy: 87.1 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

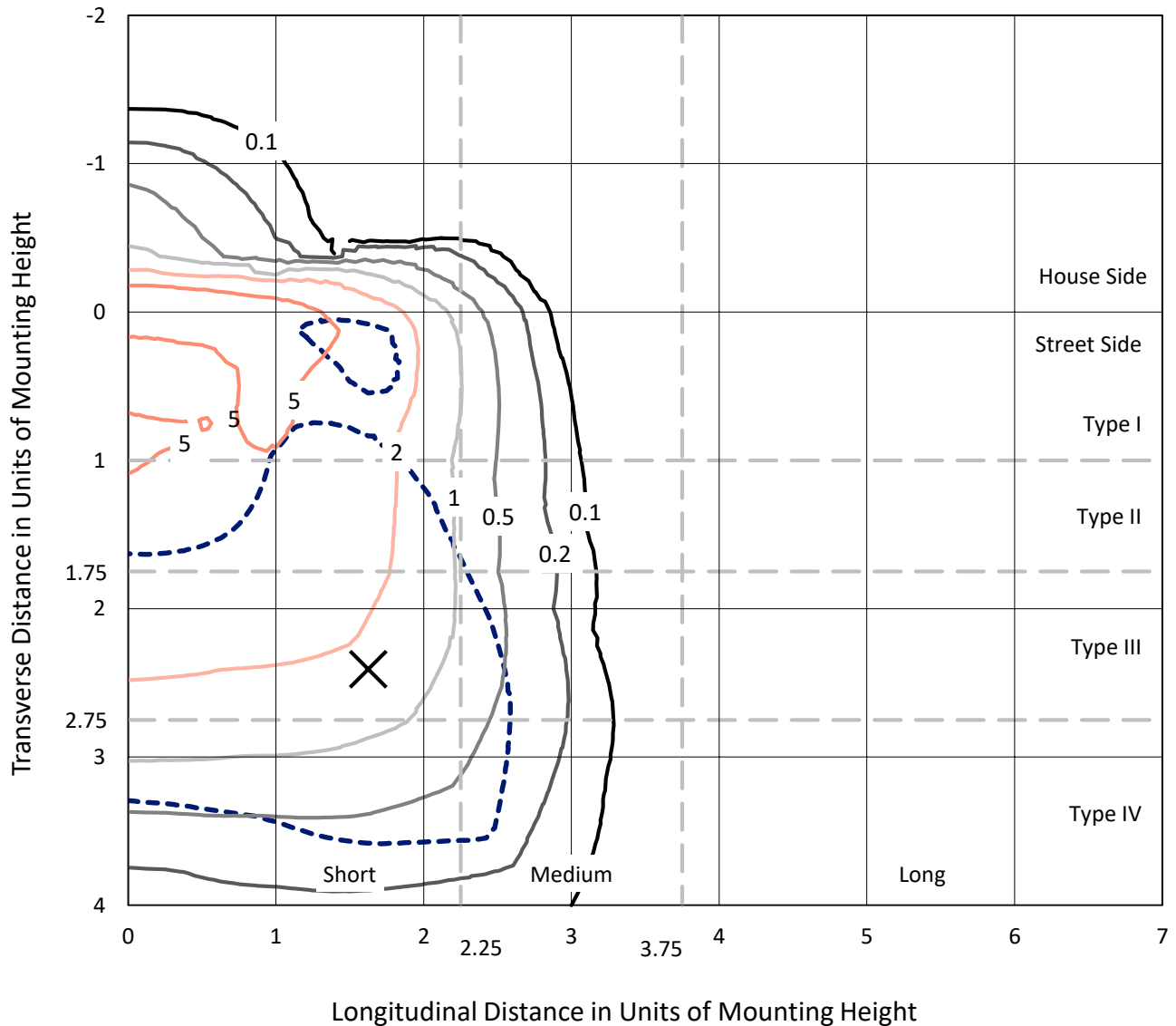


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Iso-Footcandle Lines of Horizontal Illumination

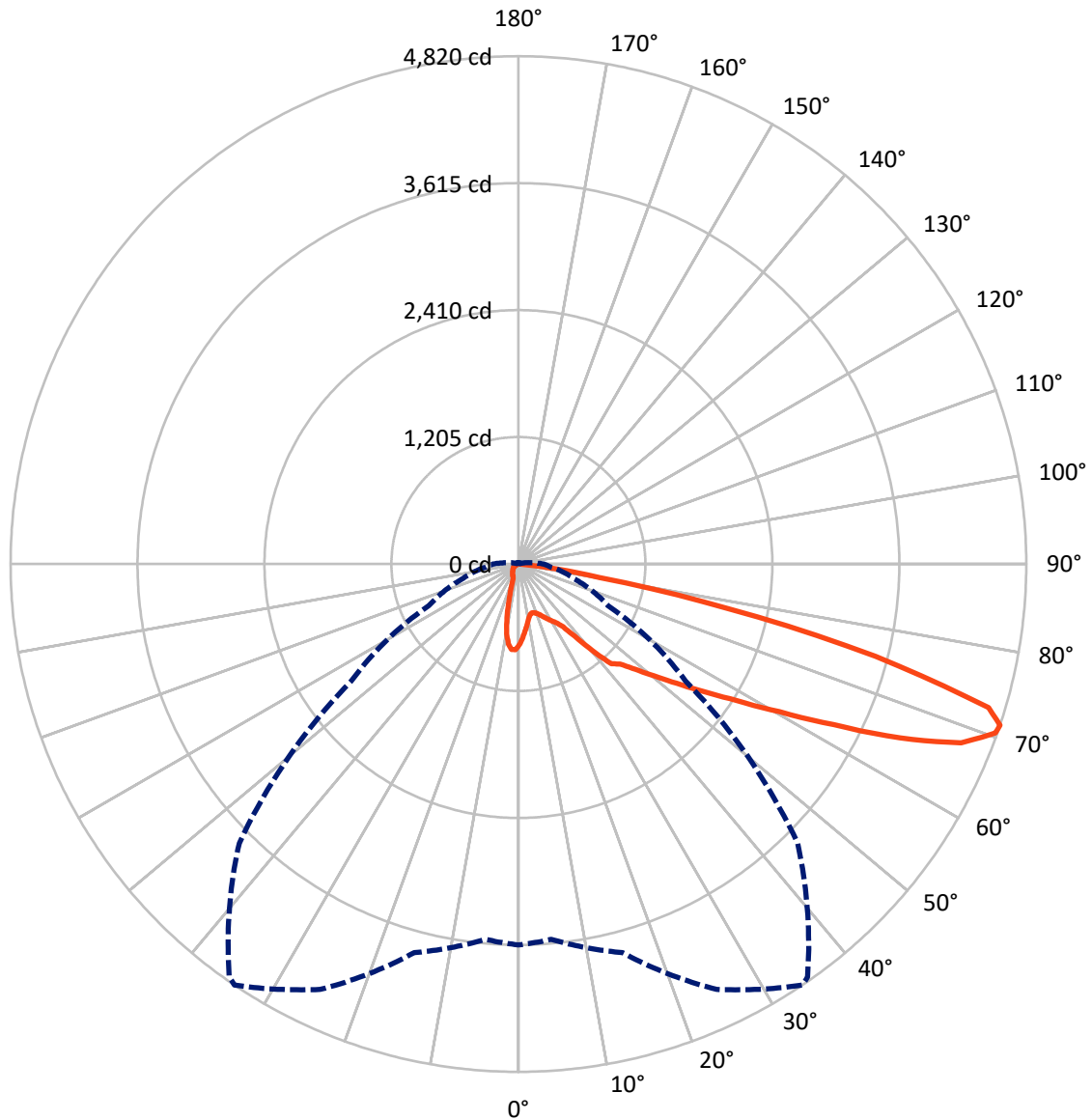
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.7 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	550.9	0.0	550.9
	% Fixture	11.1	0.0	11.1
Street Side	Lumens	4431.1	0.0	4431.1
	% Fixture	88.9	0.0	88.9
Total	Lumens	4982.0	0.0	4982.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	1.4
10°-20°	155.9	3.1
20°-30°	232.8	4.7
30°-40°	388.7	7.8
40°-50°	702.1	14.1
50°-60°	1114.0	22.4
60°-70°	1496.9	30.0
70°-80°	794.3	15.9
80°-90°	29.3	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°	4982.0	100.0
0°-180°	4982.0	100.0

Coefficient of Utilization



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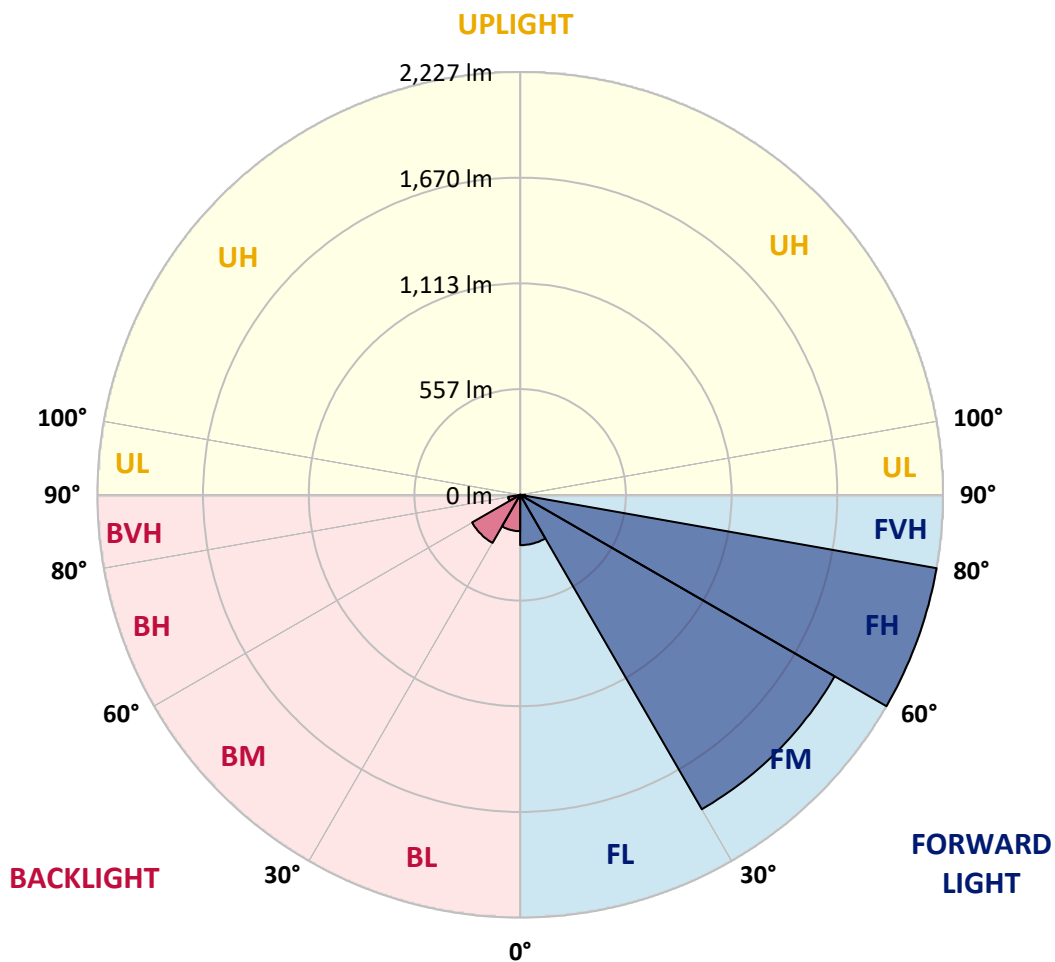
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	265.1	5.3			
FM	(30°-60°)	1912.4	38.4			
FH	(60°-80°)	2226.9	44.7			G2/5000
FVH	(80°-90°)	26.7	0.5			G1/100
BL	(0°-30°)	191.6	3.8	B1/500		
BM	(30°-60°)	292.3	5.9	B1/1000		
BH	(60°-80°)	64.3	1.3	B0/110		G0/110
BVH	(80°-90°)	2.6	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°	771.9	771.9	771.9	771.9	771.9	771.9	771.9	771.9	771.9	771.9	771.9
2.5°	702.9	693.9	701.9	705.9	708.9	712.9	718.9	729.9	741.9	755.9	763.9
5°	612.9	617.9	620.9	631.9	642.9	644.9	663.9	685.9	713.9	741.9	765.9
7.5°	540.0	540.0	549.0	566.0	584.0	586.0	618.9	647.9	687.9	730.9	769.9
10°	482.0	484.0	491.0	508.0	531.0	536.0	573.0	612.9	662.9	718.9	773.9
12.5°	463.0	462.0	461.0	473.0	492.0	497.0	538.0	586.0	644.9	712.9	783.9
15°	475.0	472.0	465.0	467.0	479.0	484.0	520.0	568.0	633.9	711.9	800.9
17.5°	494.0	490.0	477.0	473.0	486.0	491.0	521.0	563.0	629.9	716.9	820.9
20°	517.0	513.0	493.0	488.0	501.0	505.0	536.0	572.0	631.9	726.9	847.9
22.5°	550.0	545.0	516.0	510.0	523.0	527.0	560.0	592.9	643.9	744.9	884.9
25°	589.9	584.0	547.0	539.0	555.0	559.0	591.9	622.9	663.9	768.9	931.9
27.5°	633.9	626.9	587.9	572.0	589.9	595.9	626.9	660.9	692.9	798.9	993.9
30°	673.9	665.9	627.9	609.9	627.9	630.9	667.9	705.9	739.9	849.9	1084.9
32.5°	784.9	764.9	705.9	653.9	665.9	671.9	716.9	776.9	827.9	910.9	1201.9
35°	950.9	934.9	862.9	772.9	730.9	732.9	790.9	866.9	889.9	981.9	1346.9
37.5°	1110.9	1096.9	1033.9	950.9	870.9	873.9	883.9	956.9	983.9	1104.9	1523.9
40°	1285.9	1263.9	1213.9	1134.9	1079.9	1066.9	1017.9	1068.9	1127.9	1259.9	1716.9
42.5°	1366.9	1345.9	1293.9	1298.9	1292.9	1269.9	1172.9	1243.9	1309.9	1484.9	1929.8
45°	1500.9	1459.9	1352.9	1360.9	1352.9	1354.9	1378.9	1481.9	1538.9	1722.9	2170.8
47.5°	1624.9	1577.9	1465.9	1457.9	1492.9	1510.9	1639.9	1764.8	1769.8	1929.8	2359.8
50°	1737.9	1703.9	1600.9	1601.9	1665.9	1685.9	1943.8	2057.8	1956.8	2088.8	2507.8
52.5°	1887.8	1839.8	1747.9	1780.8	1880.8	1898.8	2246.8	2314.8	2091.8	2232.8	2623.8
55°	2026.8	2000.8	1932.8	1981.8	2134.8	2181.8	2554.8	2512.8	2186.8	2360.8	2679.8
57.5°	2254.8	2229.8	2211.8	2236.8	2441.8	2500.8	2866.8	2652.8	2260.8	2445.8	2653.8
60°	2634.8	2609.8	2555.8	2578.8	2845.8	2875.8	3111.7	2794.8	2289.8	2469.8	2551.8
62.5°	3103.7	3072.7	2985.7	3091.7	3359.7	3358.7	3365.7	2869.8	2252.8	2398.8	2282.8
65°	3526.7	3483.7	3438.7	3654.7	3980.7	3935.7	3635.7	2878.8	2135.8	2055.8	1765.8
67.5°	3834.7	3817.7	3842.7	4179.6	4530.6	4485.6	3897.7	2754.8	1777.8	1483.9	1090.9
70°	3822.7	3787.7	3946.7	4484.6	4803.6	4766.6	3886.7	2263.8	1185.9	785.9	457.0
71°	3615.7	3575.7	3817.7	4454.6	4819.6	4784.6	3746.7	1936.8	937.9	555.0	301.0
72.5°	2793.8	2914.8	3299.7	4133.6	4665.6	4620.6	3365.7	1482.9	593.9	321.0	151.0
75°	1181.9	1247.9	1958.8	2950.7	3499.7	3476.7	2268.8	684.9	273.0	145.0	58.0
77.5°	304.0	300.0	599.9	1265.9	2037.8	2073.8	1045.9	235.0	142.0	103.0	33.0
80°	59.0	64.0	171.0	440.0	777.9	798.9	341.0	103.0	95.0	81.0	17.0
82.5°	6.0	7.0	30.0	136.0	261.0	252.0	75.0	39.0	58.0	55.0	8.0
85°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	4.0	14.0	15.0	2.0
87.5°	0.0	0.0	1.0	1.0	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°	771.9	771.9	771.9	771.9	771.9	771.9	771.9	771.9	771.9	771.9	771.9
2.5°	769.9	778.9	788.9	795.9	802.9	803.9	813.9	811.9	814.9	815.9	814.9
5°	778.9	790.9	809.9	819.9	823.9	816.9	814.9	803.9	799.9	794.9	789.9
7.5°	788.9	803.9	825.9	830.9	816.9	790.9	769.9	742.9	717.9	701.9	703.9
10°	799.9	818.9	836.9	823.9	787.9	736.9	677.9	617.9	565.0	545.0	552.0
12.5°	813.9	836.9	844.9	808.9	738.9	635.9	529.0	438.0	383.0	350.0	346.0
15°	834.9	857.9	848.9	784.9	660.9	500.0	367.0	275.0	222.0	205.0	196.0
17.5°	860.9	882.9	848.9	741.9	550.0	358.0	223.0	167.0	150.0	146.0	147.0
20°	892.9	913.9	844.9	676.9	424.0	220.0	149.0	138.0	138.0	138.0	137.0
22.5°	935.9	946.9	838.9	590.9	292.0	149.0	132.0	131.0	132.0	132.0	132.0
25°	987.9	985.9	827.9	488.0	184.0	127.0	126.0	126.0	127.0	128.0	128.0
27.5°	1056.9	1035.9	808.9	365.0	130.0	118.0	120.0	122.0	124.0	126.0	126.0
30°	1152.9	1101.9	777.9	247.0	110.0	109.0	113.0	119.0	122.0	124.0	124.0
32.5°	1255.9	1169.9	724.9	158.0	101.0	100.0	104.0	113.0	121.0	123.0	123.0
35°	1385.9	1242.9	645.9	114.0	95.0	93.0	97.0	105.0	117.0	123.0	123.0
37.5°	1522.9	1320.9	531.0	96.0	89.0	87.0	90.0	96.0	110.0	121.0	122.0
40°	1668.9	1389.9	399.0	89.0	83.0	82.0	83.0	89.0	100.0	115.0	118.0
42.5°	1815.8	1447.9	279.0	82.0	78.0	76.0	78.0	82.0	92.0	105.0	107.0
45°	1977.8	1511.9	186.0	76.0	74.0	72.0	74.0	77.0	84.0	91.0	92.0
47.5°	2095.8	1534.9	128.0	69.0	68.0	69.0	70.0	72.0	76.0	77.0	76.0
50°	2173.8	1522.9	92.0	62.0	63.0	66.0	66.0	67.0	67.0	64.0	63.0
52.5°	2230.8	1478.9	71.0	53.0	59.0	62.0	62.0	60.0	58.0	54.0	53.0
55°	2236.8	1379.9	56.0	46.0	53.0	58.0	57.0	53.0	49.0	45.0	45.0
57.5°	2160.8	1229.9	46.0	39.0	46.0	51.0	49.0	45.0	40.0	37.0	37.0
60°	2037.8	1075.9	39.0	33.0	38.0	43.0	40.0	37.0	32.0	29.0	29.0
62.5°	1810.8	923.9	32.0	27.0	31.0	34.0	33.0	30.0	25.0	23.0	22.0
65°	1387.9	702.9	24.0	21.0	24.0	28.0	26.0	23.0	20.0	17.0	16.0
67.5°	833.9	423.0	19.0	16.0	19.0	22.0	20.0	17.0	14.0	12.0	12.0
70°	353.0	181.0	15.0	12.0	14.0	17.0	16.0	14.0	11.0	10.0	10.0
71°	240.0	129.0	13.0	11.0	13.0	16.0	15.0	13.0	11.0	10.0	10.0
72.5°	123.0	66.0	11.0	9.0	12.0	14.0	14.0	12.0	10.0	10.0	10.0
75°	44.0	28.0	9.0	8.0	10.0	10.0	11.0	11.0	11.0	11.0	10.0
77.5°	25.0	17.0	8.0	8.0	8.0	9.0	11.0	12.0	13.0	13.0	12.0
80°	14.0	9.0	5.0	6.0	8.0	9.0	11.0	12.0	14.0	14.0	13.0
82.5°	7.0	3.0	1.0	3.0	5.0	8.0	9.0	10.0	12.0	11.0	11.0
85°	1.0	0.0	0.0	1.0	3.0	4.0	6.0	8.0	10.0	10.0	9.0
87.5°	0.0	0.0	0.0	0.0	1.0	2.0	3.0	5.0	7.0	8.0	7.0
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)