

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: P675411

Luminaire Tested: **CCW-SA-1B-740-U-SL2**

Issue Date: 04/25/2023

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

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Test Information

Test Method: LM-79-08
 Report Number: P675411
 Test Lab: INNOVATION CENTER(G1)
 Issue Date: 04/25/2023
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: INVUE
 Catalog Number: CCW-SA-1B-740-U-SL2
 Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @450mA w/
 SL2 distribution lens
 Light Source: (16) 4000K CCT, 70 CRI LEDs
 Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 3418 lumens
 Efficiency: N/A
 Efficacy: 142.4 lumens/watt
 Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
 IES Classification: Type III - Medium
 BUG Rating: B1 - U0 - G1

Input Watts (W): 24
 Input Voltage (V): 120
 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

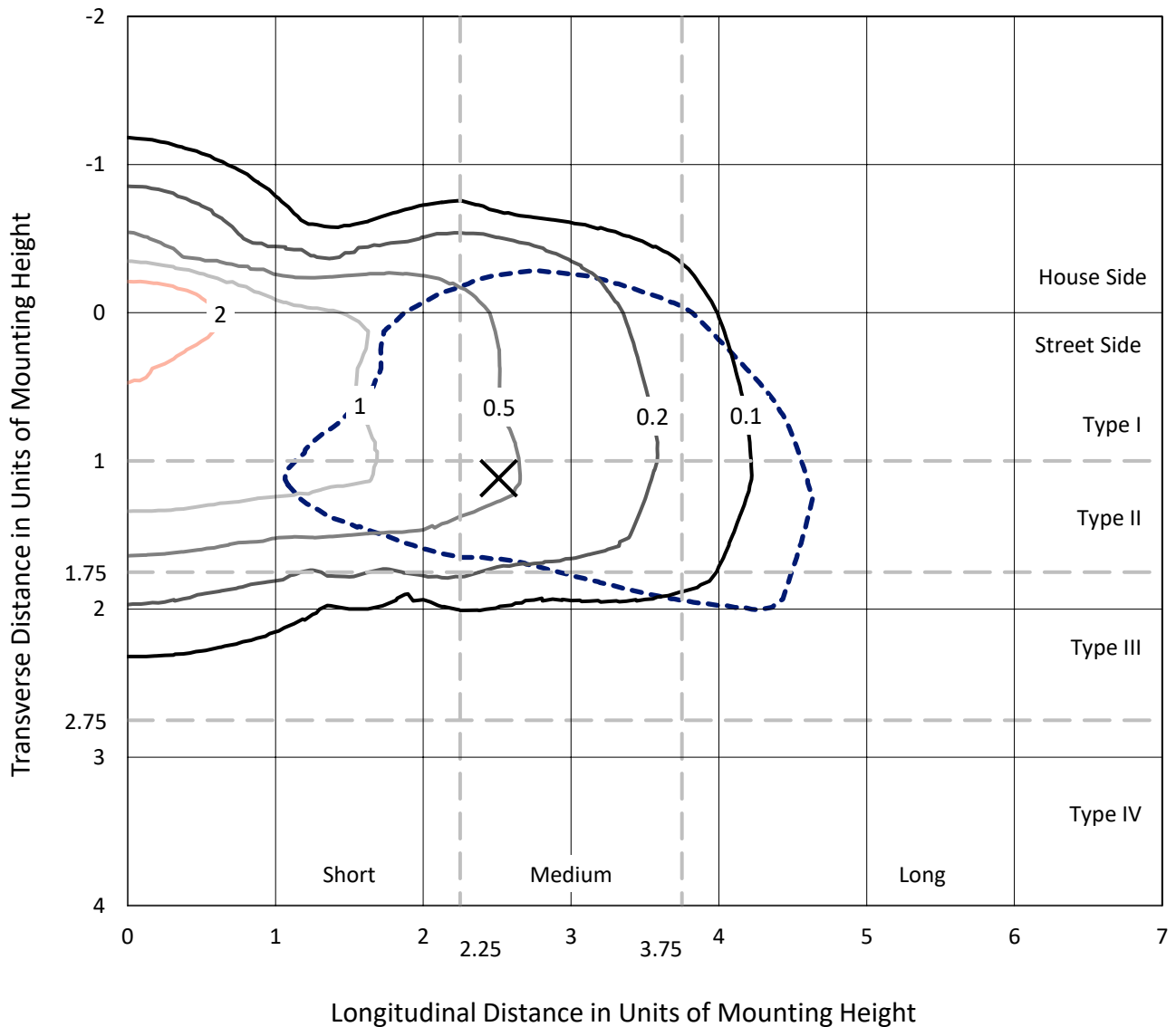


Me			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

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Iso-Footcandle Lines of Horizontal Illumination

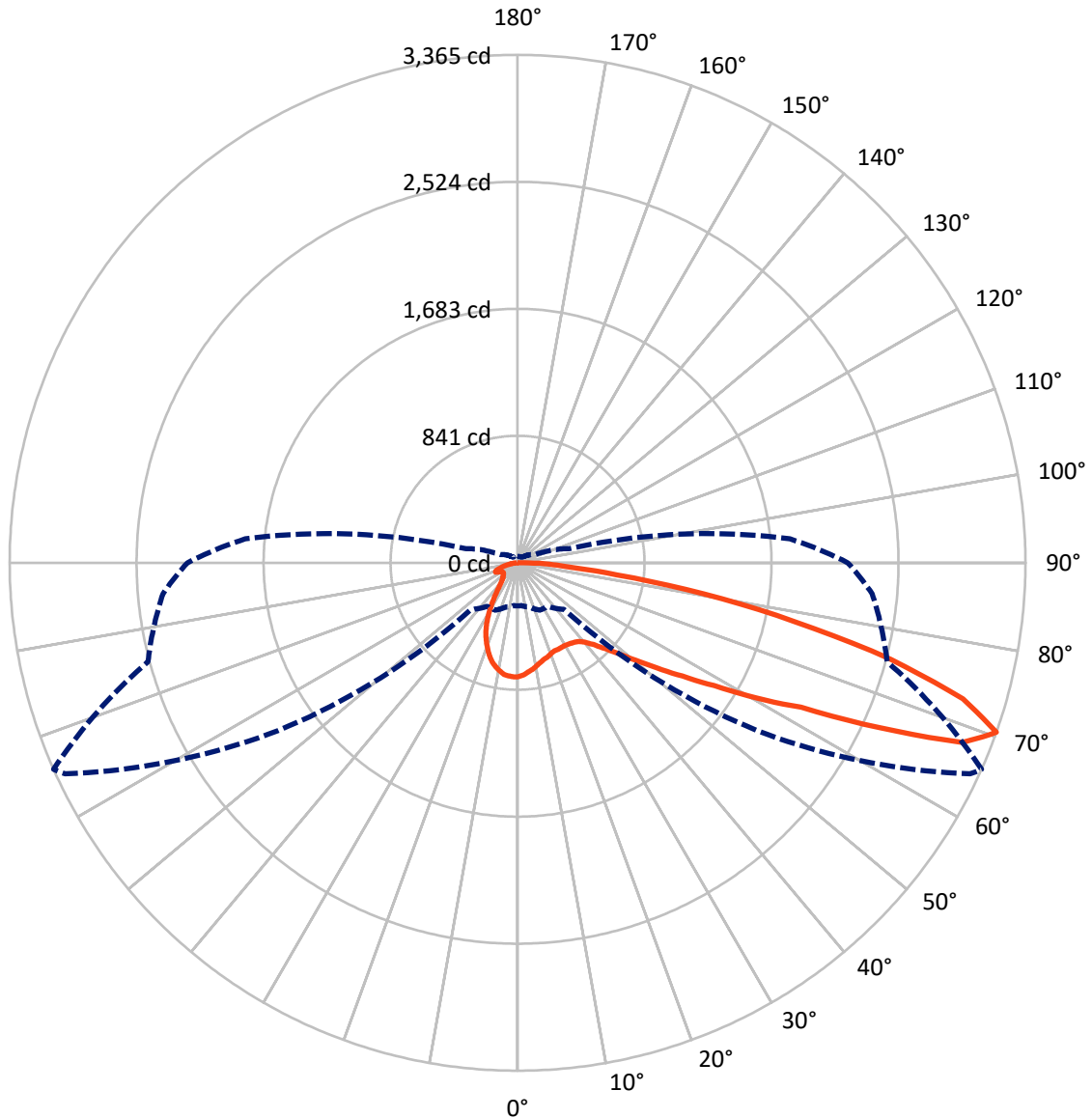
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.4 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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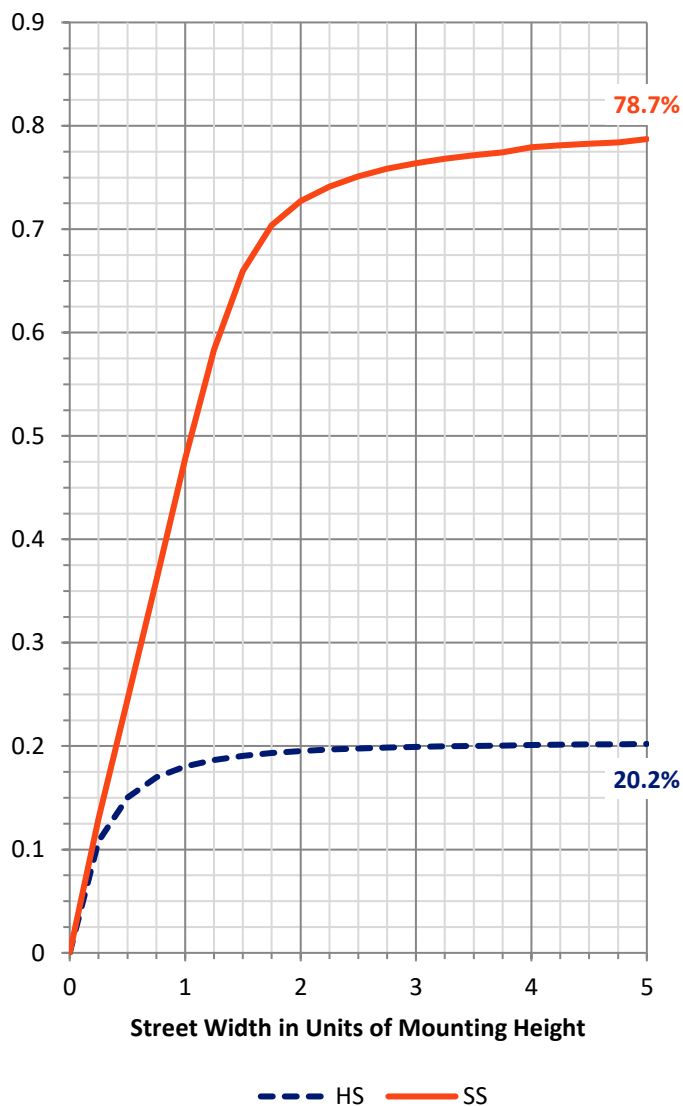
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	699.6	0.0	699.6
	% Fixture	20.5	0.0	20.5
Street Side	Lumens	2718.4	0.0	2718.4
	% Fixture	79.5	0.0	79.5
Total	Lumens	3418.0	0.0	3418.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	2.0
10°-20°	164.4	4.8
20°-30°	225.7	6.6
30°-40°	302.7	8.9
40°-50°	439.1	12.8
50°-60°	667.5	19.5
60°-70°	824.4	24.1
70°-80°	613.1	17.9
80°-90°	114.4	3.3
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°	3418.0	100.0
0°-180°	3418.0	100.0

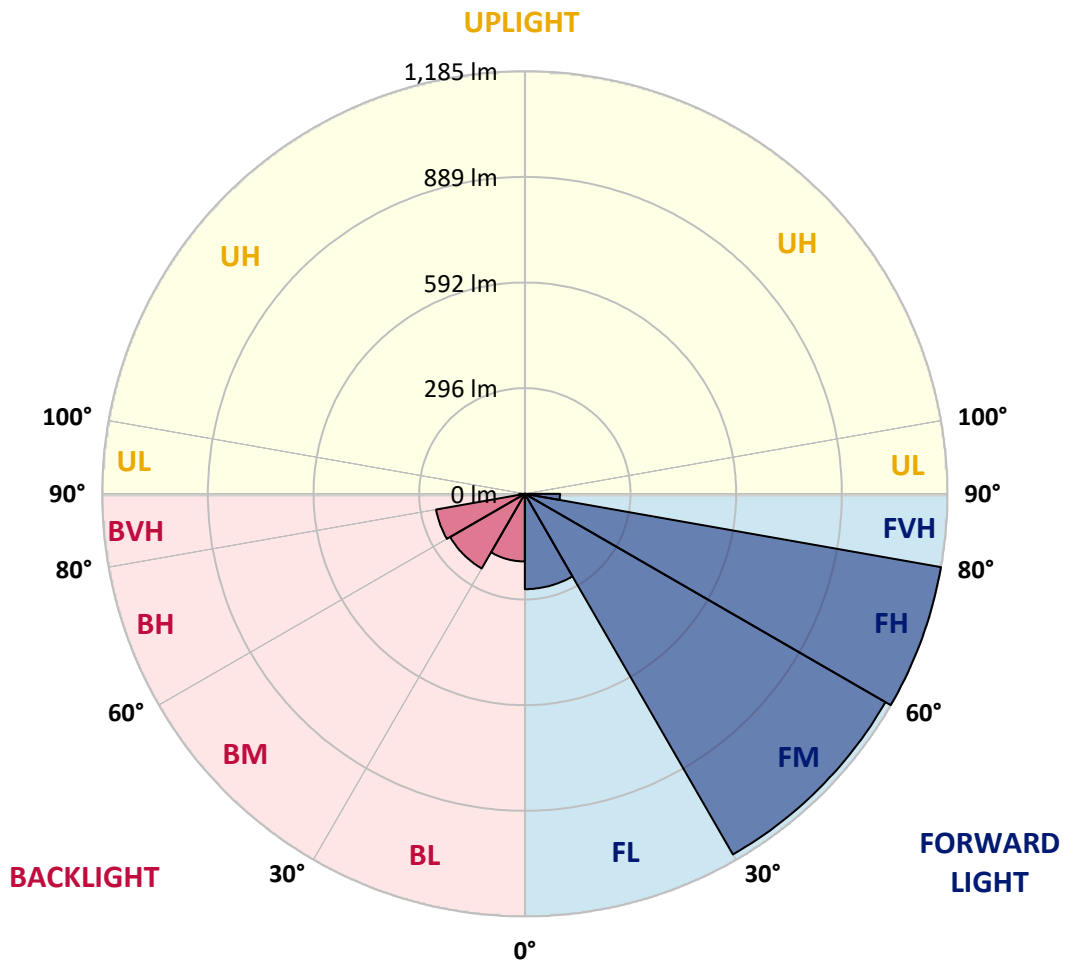


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	267.3	7.8			
FM (30°-60°)	1167.6	34.2			
FH (60°-80°)	1184.9	34.7			G1/1800
FVH (80°-90°)	98.6	2.9			G1/100
BL (0°-30°)	189.6	5.5	B1/500		
BM (30°-60°)	241.7	7.1	B1/1000		
BH (60°-80°)	252.6	7.4	B1/500		G1/500
BVH (80°-90°)	15.8	0.5			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°	66°	75°	85°
0°	755.1	755.1	755.1	755.1	755.1	755.1	755.1	755.1	755.1	755.1	755.1
2.5°	718.3	722.1	723.4	725.9	732.3	737.3	745.0	748.8	745.0	750.1	750.1
5°	668.7	663.6	676.3	681.4	689.0	699.2	717.0	731.0	727.2	742.4	755.1
7.5°	626.7	626.7	630.6	642.0	650.9	666.2	685.2	706.8	713.2	733.5	752.6
10°	588.6	593.7	593.7	611.5	616.6	634.4	666.2	692.8	694.1	728.4	755.1
12.5°	568.3	565.7	578.4	583.5	598.8	616.6	642.0	675.0	676.3	713.2	750.1
15°	551.7	554.3	560.6	573.3	587.3	601.3	625.5	656.0	662.3	705.6	747.5
17.5°	553.0	554.3	554.3	563.2	574.6	591.1	614.0	649.6	653.4	695.4	743.7
20°	560.6	555.5	559.4	563.2	570.8	586.1	605.1	635.6	639.5	694.1	752.6
22.5°	577.2	573.3	572.1	570.8	569.5	578.4	602.6	628.0	631.8	687.8	756.4
25°	603.9	602.6	593.7	584.8	578.4	578.4	597.5	634.4	633.1	687.8	759.0
27.5°	635.6	635.6	634.4	617.8	598.8	588.6	601.3	631.8	630.6	687.8	765.3
30°	678.9	678.9	675.0	659.8	625.5	596.2	603.9	629.3	633.1	682.7	760.2
32.5°	725.9	724.6	728.4	714.5	678.9	631.8	619.1	634.4	638.2	687.8	761.5
35°	760.2	767.9	780.6	767.9	732.3	668.7	640.7	644.5	647.1	689.0	766.6
37.5°	799.6	808.5	826.3	836.5	798.4	724.6	675.0	661.1	661.1	705.6	767.9
40°	856.8	847.9	878.5	896.3	881.0	793.3	728.4	691.6	692.8	727.2	784.4
42.5°	898.8	907.7	939.5	971.3	952.2	877.2	786.9	741.2	741.2	759.0	809.8
45°	945.8	956.0	1000.5	1038.6	1052.6	977.6	867.0	812.3	809.8	821.2	855.6
47.5°	998.0	1011.9	1062.8	1107.3	1144.2	1081.9	970.0	898.8	897.5	906.4	931.8
50°	1057.7	1062.8	1104.7	1186.1	1259.8	1220.4	1095.8	1020.8	1014.5	1018.3	1052.6
52.5°	1075.5	1071.7	1120.0	1207.7	1342.5	1389.5	1267.5	1159.4	1156.9	1148.0	1192.5
55°	1010.7	1023.4	1070.4	1182.3	1409.9	1589.1	1455.6	1348.8	1325.9	1301.8	1355.2
57.5°	881.0	882.3	935.7	1067.9	1357.7	1754.4	1774.7	1534.4	1535.7	1470.9	1531.9
60°	685.2	681.4	723.4	842.9	1209.0	1805.2	2123.0	1830.6	1817.9	1640.0	1695.9
62.5°	494.5	486.9	495.8	565.7	903.9	1727.7	2465.0	2162.4	2109.1	1812.8	1856.1
65°	406.8	410.6	414.4	418.3	507.2	1425.1	2570.5	2704.0	2632.8	2015.0	2032.8
67.5°	336.9	339.4	356.0	378.8	376.3	841.6	2448.5	3204.9	3178.2	2265.4	2185.3
70°	286.0	284.8	303.8	345.8	352.1	437.3	1938.7	3307.9	3365.1	2534.9	2358.2
72.5°	228.8	231.4	247.9	303.8	345.8	368.7	1116.2	3086.7	3085.4	2742.2	2265.4
75°	164.0	164.0	186.9	251.7	334.3	364.9	617.8	2505.7	2552.7	2576.9	1965.4
77.5°	108.1	113.1	130.9	188.1	314.0	357.2	391.6	1821.7	1880.2	1927.3	1503.9
80°	73.7	76.3	87.7	130.9	265.7	359.8	320.4	1225.5	1248.4	1064.1	610.2
82.5°	44.5	45.8	58.5	91.5	190.7	342.0	301.3	676.3	662.3	321.6	175.4
85°	24.2	25.4	36.9	61.0	125.9	298.8	296.2	331.8	308.9	118.2	73.7
87.5°	8.9	8.9	16.5	30.5	72.5	204.7	258.1	197.0	184.3	59.8	34.3
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°	755.1	755.1	755.1	755.1	755.1	755.1	755.1	755.1	755.1	755.1	755.1
2.5°	756.4	756.4	756.4	756.4	755.1	750.1	753.9	752.6	745.0	746.2	741.2
5°	753.9	760.2	756.4	751.3	745.0	729.7	724.6	720.8	710.6	706.8	710.6
7.5°	760.2	755.1	752.6	743.7	718.3	704.3	686.5	664.9	649.6	645.8	649.6
10°	759.0	759.0	747.5	722.1	697.9	657.3	634.4	596.2	574.6	568.3	569.5
12.5°	753.9	757.7	739.9	699.2	653.4	603.9	561.9	521.2	483.1	467.8	465.3
15°	759.0	755.1	723.4	671.2	607.7	539.0	478.0	418.3	382.7	359.8	354.7
17.5°	751.3	747.5	701.7	633.1	547.9	460.2	383.9	319.1	283.5	274.6	274.6
20°	760.2	736.1	676.3	587.3	485.6	373.8	287.3	239.0	230.1	230.1	232.6
22.5°	759.0	733.5	654.7	542.8	410.6	282.2	213.6	199.6	200.9	211.0	209.8
25°	751.3	728.4	624.2	493.3	331.8	212.3	176.7	172.9	181.8	193.2	192.0
27.5°	750.1	714.5	596.2	434.8	253.0	167.8	153.8	153.8	162.7	172.9	171.6
30°	742.4	703.0	561.9	368.7	190.7	146.2	141.1	141.1	144.9	150.0	150.0
32.5°	741.2	687.8	523.8	300.0	152.6	132.2	129.7	130.9	130.9	133.5	132.2
35°	731.0	667.4	484.4	232.6	132.2	124.6	122.0	120.8	120.8	119.5	119.5
37.5°	727.2	654.7	443.7	180.5	123.3	118.2	115.7	111.9	110.6	110.6	109.3
40°	731.0	642.0	404.3	146.2	115.7	113.1	109.3	104.2	103.0	103.0	103.0
42.5°	745.0	640.7	363.6	127.1	111.9	108.1	103.0	97.9	96.6	97.9	96.6
45°	776.8	650.9	324.2	118.2	106.8	103.0	96.6	92.8	91.5	92.8	92.8
47.5°	828.9	678.9	288.6	113.1	103.0	97.9	91.5	87.7	87.7	87.7	87.7
50°	915.3	732.3	254.3	109.3	100.4	94.1	87.7	82.6	81.4	81.4	82.6
52.5°	1045.0	823.8	226.3	106.8	96.6	89.0	82.6	78.8	76.3	75.0	76.3
55°	1201.4	957.3	217.4	104.2	91.5	85.2	78.8	73.7	71.2	71.2	69.9
57.5°	1369.2	1104.7	232.6	101.7	87.7	80.1	73.7	68.6	66.1	64.8	64.8
60°	1551.0	1278.9	288.6	100.4	83.9	75.0	68.6	64.8	61.0	59.8	59.8
62.5°	1716.2	1436.5	389.0	99.2	81.4	69.9	63.6	58.5	55.9	54.7	54.7
65°	1904.4	1612.0	486.9	104.2	80.1	66.1	58.5	53.4	50.9	49.6	49.6
67.5°	2068.4	1764.5	544.1	117.0	83.9	61.0	52.1	48.3	47.0	45.8	45.8
70°	2187.9	1811.6	364.9	128.4	90.3	57.2	47.0	44.5	42.0	42.0	42.0
72.5°	2027.7	1617.1	216.1	120.8	85.2	53.4	42.0	39.4	38.1	38.1	36.9
75°	1734.0	1376.8	166.5	97.9	68.6	45.8	36.9	34.3	33.1	33.1	31.8
77.5°	1280.2	986.5	123.3	77.5	53.4	36.9	31.8	30.5	29.2	28.0	28.0
80°	500.9	432.2	83.9	57.2	39.4	29.2	26.7	25.4	24.2	22.9	22.9
82.5°	155.1	130.9	48.3	38.1	28.0	22.9	21.6	20.3	19.1	17.8	17.8
85°	67.4	64.8	31.8	24.2	19.1	15.3	15.3	14.0	12.7	11.4	11.4
87.5°	33.1	31.8	17.8	11.4	10.2	7.6	7.6	6.4	5.1	5.1	5.1
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)