

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: STREETWORKS

Report Number: P798649

Luminaire Tested: **ARCH1-20-740-U-T4W**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798649
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-20-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 700mA LIGHTSQUARE WITH 10 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3477 lumens
Efficiency: N/A
Efficacy: 148.0 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 23.5
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: 24 FT

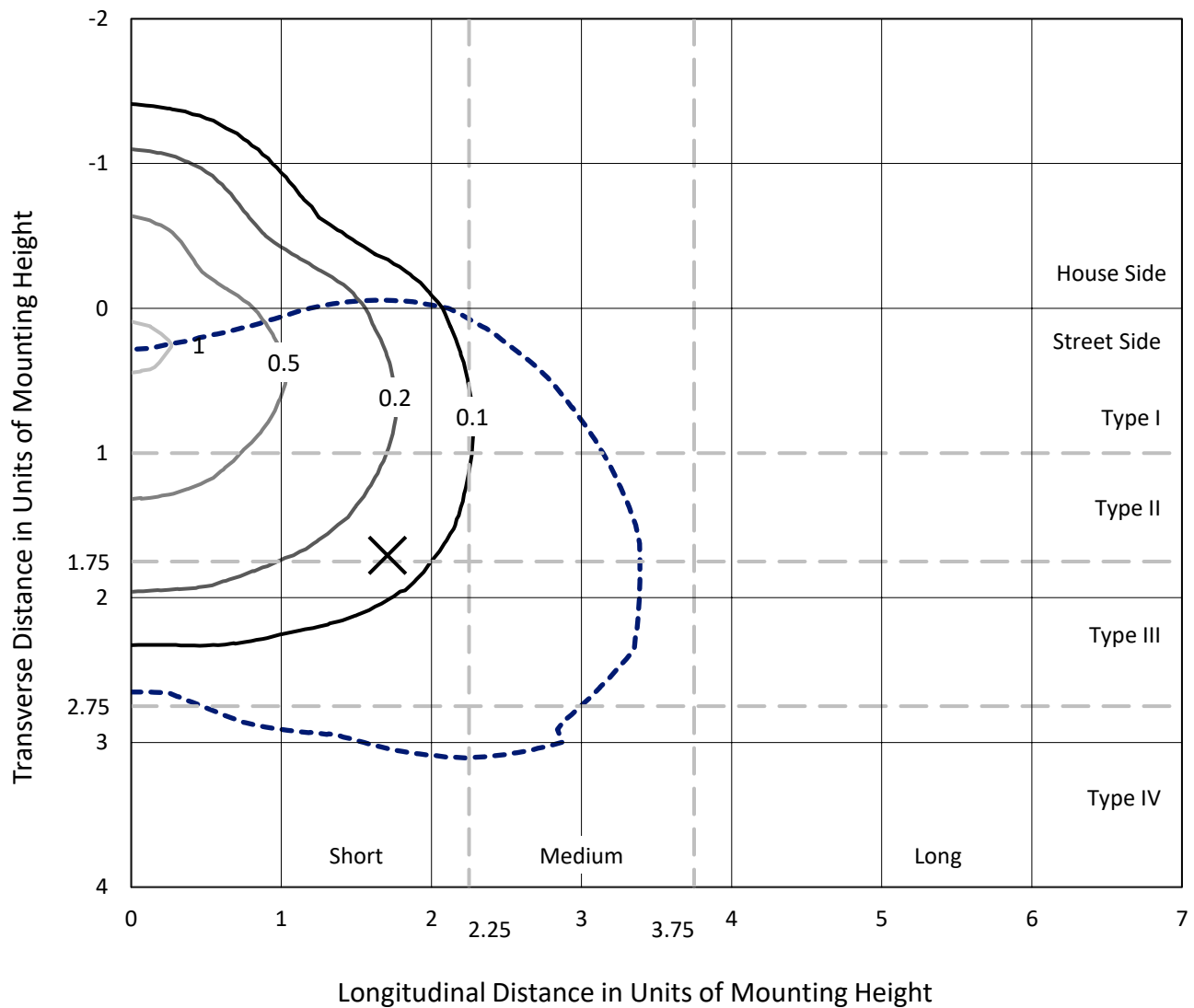


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Iso-Footcandle Lines of Horizontal Illumination

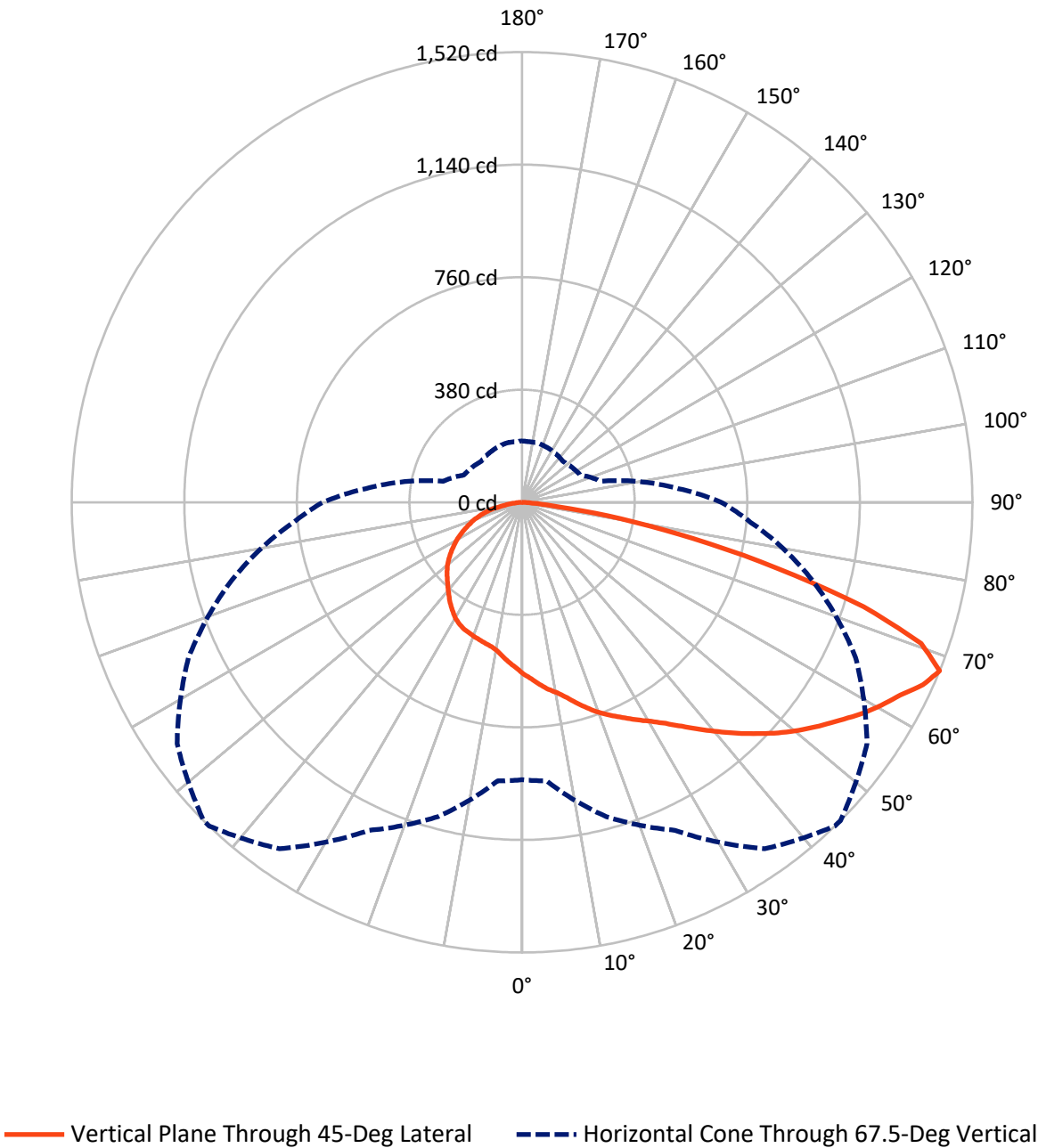
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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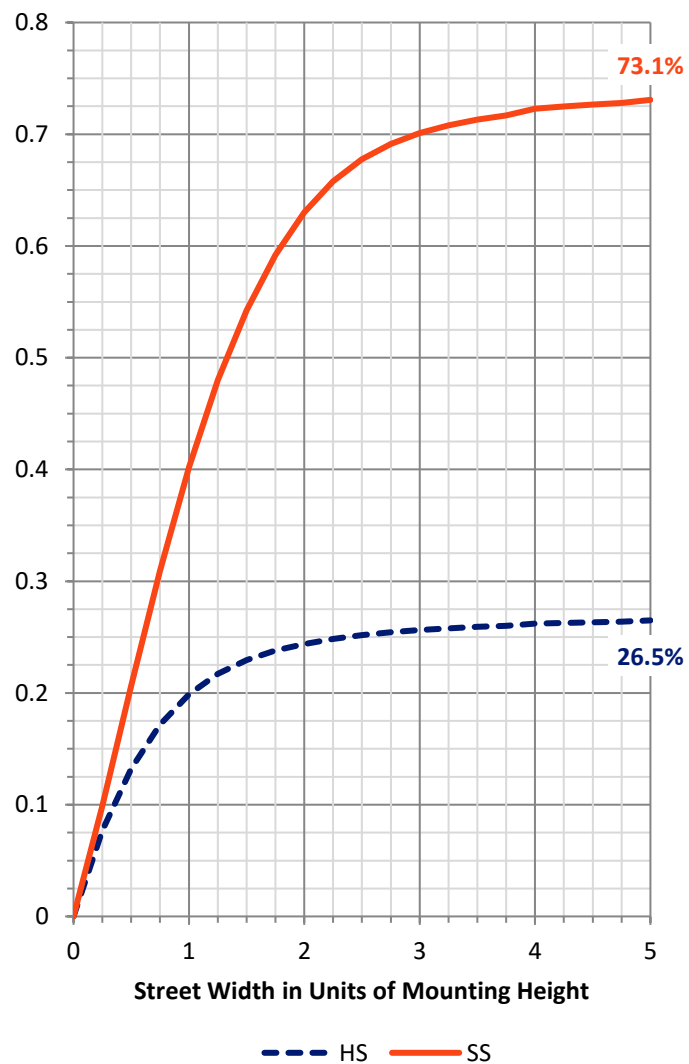
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	928.9	0.0	928.9
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	2548.1	0.0	2548.1
	% Fixture	73.3	0.0	73.3
Total	Lumens	3477.0	0.0	3477.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.5	1.6
10°-20°	171.5	4.9
20°-30°	296.1	8.5
30°-40°	436.6	12.6
40°-50°	591.5	17.0
50°-60°	722.9	20.8
60°-70°	745.6	21.4
70°-80°	408.4	11.7
80°-90°	48.9	1.4
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°	3477.0	100.0
0°-180°	3477.0	100.0

Coefficient of Utilization



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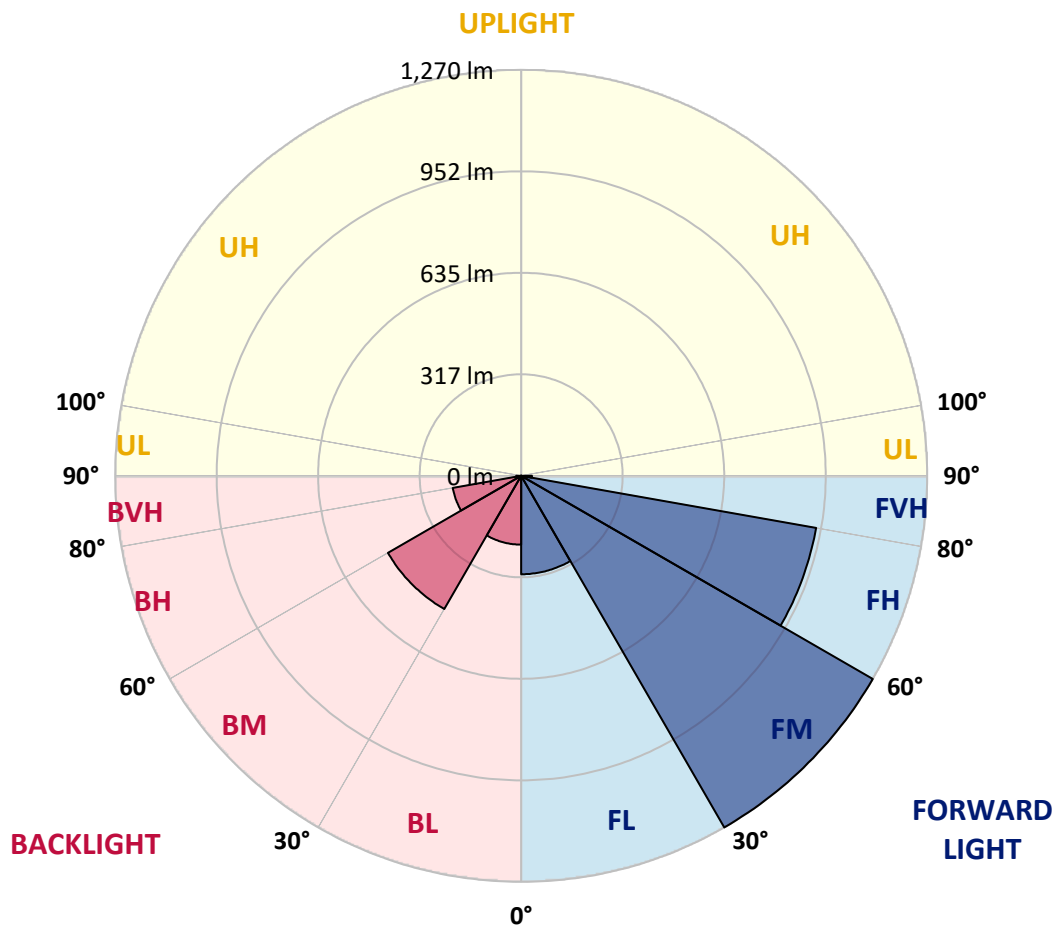
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	307.8	8.9			
FM	(30°-60°)	1269.8	36.5			
FH	(60°-80°)	936.8	26.9			G1/1800
FVH	(80°-90°)	33.7	1.0			G1/100
BL	(0°-30°)	215.3	6.2	B1/500		
BM	(30°-60°)	481.1	13.8	B1/1000		
BH	(60°-80°)	217.2	6.2	B1/500		G1/500
BVH	(80°-90°)	15.2	0.4			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°	35°	44°	45°	55°	65°	75°	85°
0°	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9
2.5°	605.3	604.8	605.8	602.1	597.4	596.8	596.8	593.7	590.0	582.5	576.7
5°	633.9	632.8	633.3	628.0	621.7	618.5	618.0	611.1	602.6	591.0	580.4
7.5°	660.3	659.3	658.7	652.9	643.4	638.1	637.6	627.5	617.5	599.5	584.1
10°	685.2	684.1	683.1	675.1	663.5	655.6	654.5	641.8	629.1	606.9	587.3
12.5°	716.9	714.8	713.8	704.2	687.3	678.8	677.3	660.3	644.4	617.5	593.7
15°	750.3	748.7	747.1	738.1	719.1	707.9	705.3	684.1	662.4	631.2	603.2
17.5°	775.1	773.5	773.5	765.6	748.2	735.5	733.3	707.9	681.0	643.9	610.6
20°	790.5	788.9	790.5	785.7	772.5	761.9	759.8	731.8	699.5	655.6	616.9
22.5°	801.6	800.0	802.7	800.5	791.0	784.7	783.1	755.6	718.5	667.7	623.3
25°	821.2	821.2	821.2	817.5	808.5	806.4	806.4	782.5	742.9	683.6	632.8
27.5°	860.3	858.2	855.6	845.0	829.6	829.1	832.3	810.1	770.9	704.2	644.4
30°	918.0	916.9	906.9	884.7	858.7	856.1	858.2	839.7	801.1	725.9	657.7
32.5°	992.6	988.9	968.3	934.9	897.9	885.7	890.0	870.4	832.8	748.2	670.4
35°	1045.5	1046.6	1031.8	1001.6	957.7	925.4	928.6	904.8	867.2	773.0	686.2
37.5°	1106.4	1110.1	1087.8	1065.1	1024.3	969.3	972.5	940.2	901.6	804.2	703.2
40°	1190.5	1183.1	1145.5	1118.5	1073.6	1015.3	1018.0	979.9	941.3	833.9	722.8
42.5°	1260.9	1247.6	1202.1	1167.7	1113.8	1064.0	1066.7	1022.8	981.5	866.7	744.4
45°	1361.9	1325.4	1259.8	1242.9	1155.0	1111.6	1114.3	1068.3	1023.8	901.6	767.7
47.5°	1420.6	1362.4	1320.6	1311.6	1200.5	1160.9	1164.0	1116.4	1069.3	941.3	792.1
50°	1416.9	1379.4	1367.2	1345.0	1240.7	1206.9	1210.1	1166.1	1115.4	980.4	815.3
52.5°	1392.6	1399.5	1393.1	1356.1	1281.0	1251.3	1255.0	1215.4	1162.4	1016.9	837.0
55°	1430.2	1434.9	1422.8	1374.1	1325.4	1295.8	1300.0	1267.2	1209.0	1049.2	855.6
57.5°	1475.1	1458.2	1446.0	1405.8	1371.4	1343.9	1348.7	1320.1	1249.2	1075.1	869.8
60°	1473.0	1437.6	1449.7	1407.9	1402.7	1388.4	1392.6	1363.5	1279.9	1094.2	875.7
62.5°	1364.6	1345.5	1406.9	1392.6	1428.1	1428.1	1433.3	1390.0	1298.4	1102.1	872.5
65°	1176.2	1177.3	1285.2	1344.5	1458.2	1482.5	1486.8	1406.4	1287.8	1078.8	842.9
67.5°	937.0	943.9	1098.9	1222.2	1428.1	1519.6	1520.1	1421.2	1242.3	1013.2	774.1
70°	685.7	691.0	874.1	1023.8	1285.7	1437.6	1429.1	1379.4	1143.4	898.9	666.7
72.5°	463.5	468.3	656.6	786.2	1055.0	1224.3	1205.8	1219.1	974.6	738.6	536.0
75°	311.6	317.5	467.2	562.4	776.2	929.6	888.4	923.3	754.0	559.3	391.0
77.5°	196.3	200.0	296.8	368.8	530.2	632.8	591.5	592.1	434.4	301.1	210.1
80°	124.9	125.9	179.9	212.7	306.9	380.4	336.5	273.5	195.8	159.8	125.4
82.5°	72.5	70.9	107.4	120.1	146.0	144.4	119.6	113.2	85.7	79.9	64.0
85°	29.1	27.0	47.1	43.9	44.4	47.1	34.9	34.9	28.0	21.7	15.9
87.5°	5.8	5.8	6.3	5.8	5.8	6.3	4.8	4.8	4.2	4.2	4.2
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°	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9	579.9
2.5°	575.7	574.6	572.0	565.1	561.4	559.3	556.1	555.0	554.5	555.0	556.6
5°	577.3	573.5	566.1	555.0	547.6	542.9	537.6	535.5	533.9	533.9	535.5
7.5°	578.3	572.5	559.8	543.4	532.8	525.4	519.1	516.4	515.9	517.5	518.0
10°	578.8	570.4	552.4	531.7	518.0	508.5	502.1	500.5	502.1	505.3	505.8
12.5°	582.5	570.9	548.2	523.8	507.4	497.9	493.1	493.1	497.4	503.2	503.7
15°	588.9	574.6	546.0	517.5	500.5	492.1	490.5	493.1	499.5	508.5	509.5
17.5°	593.7	576.7	541.3	509.0	491.5	486.2	488.9	495.2	504.2	516.4	517.5
20°	596.8	576.7	534.4	498.9	482.5	481.5	488.9	498.9	508.5	522.8	524.3
22.5°	600.0	575.7	526.5	486.8	472.5	475.7	489.4	502.1	511.6	527.0	529.6
25°	605.8	577.3	518.5	474.6	461.9	470.9	488.9	504.2	514.3	530.2	534.4
27.5°	613.8	581.0	512.7	463.5	451.3	463.5	485.2	503.7	514.3	529.6	534.4
30°	622.2	585.2	505.8	451.3	439.2	452.9	477.3	497.9	510.1	524.3	530.2
32.5°	631.2	590.0	500.0	438.1	424.3	438.6	465.6	488.9	502.1	515.3	521.7
35°	643.4	598.4	496.8	427.5	411.1	423.8	450.8	477.3	491.5	503.7	511.1
37.5°	658.2	609.0	495.2	416.9	396.8	407.4	434.9	463.0	478.3	488.4	495.2
40°	675.1	622.2	494.7	406.9	382.5	390.5	418.5	446.6	461.4	469.3	475.1
42.5°	694.2	637.0	493.7	396.8	368.3	374.6	402.6	430.2	442.9	449.7	455.0
45°	714.3	651.9	491.5	384.7	352.9	360.3	386.2	410.6	423.8	429.6	435.5
47.5°	734.4	666.7	487.3	370.9	339.2	346.0	368.8	389.9	400.5	405.8	411.6
50°	754.0	679.9	477.3	355.0	324.9	331.2	348.7	363.0	370.9	375.1	381.0
52.5°	771.4	688.9	463.0	336.5	310.6	313.8	325.4	337.6	343.9	344.4	349.7
55°	786.2	693.7	442.3	317.5	295.2	295.8	302.1	311.6	314.3	312.2	315.9
57.5°	794.7	691.0	419.6	297.9	279.4	277.3	282.0	286.8	287.3	282.0	285.7
60°	796.8	678.8	389.9	278.3	263.5	257.7	259.3	258.2	257.1	255.0	258.2
62.5°	786.2	652.9	357.1	259.3	246.6	237.6	237.0	236.5	238.1	238.6	239.2
65°	747.6	604.2	318.0	239.7	228.6	216.4	215.9	222.2	224.3	221.2	222.2
67.5°	673.0	529.6	275.1	216.9	205.8	195.2	199.5	203.2	206.9	205.8	206.9
70°	567.2	434.9	236.0	191.5	181.0	175.1	179.9	183.1	183.6	182.5	183.6
72.5°	446.0	339.7	199.5	165.6	156.1	153.4	159.3	161.9	166.7	168.8	169.3
75°	322.2	250.8	163.5	137.6	129.6	129.6	134.9	139.7	143.9	141.3	139.7
77.5°	179.9	149.7	117.5	94.7	96.3	103.7	105.8	111.1	115.3	114.8	113.8
80°	109.0	93.7	79.4	61.4	60.8	66.7	80.4	89.4	91.5	86.8	86.2
82.5°	56.6	49.2	42.3	34.4	38.1	44.4	46.6	56.1	61.9	59.8	62.4
85°	14.3	13.8	15.3	15.9	19.6	21.7	23.8	28.0	18.5	9.0	9.0
87.5°	4.2	4.2	5.3	5.3	6.9	8.5	7.9	7.9	4.2	0.5	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

(END OF REPORT)