

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: P265882

Luminaire Tested: **ARCH-AF16-30-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-30-D-U-T3-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3288 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

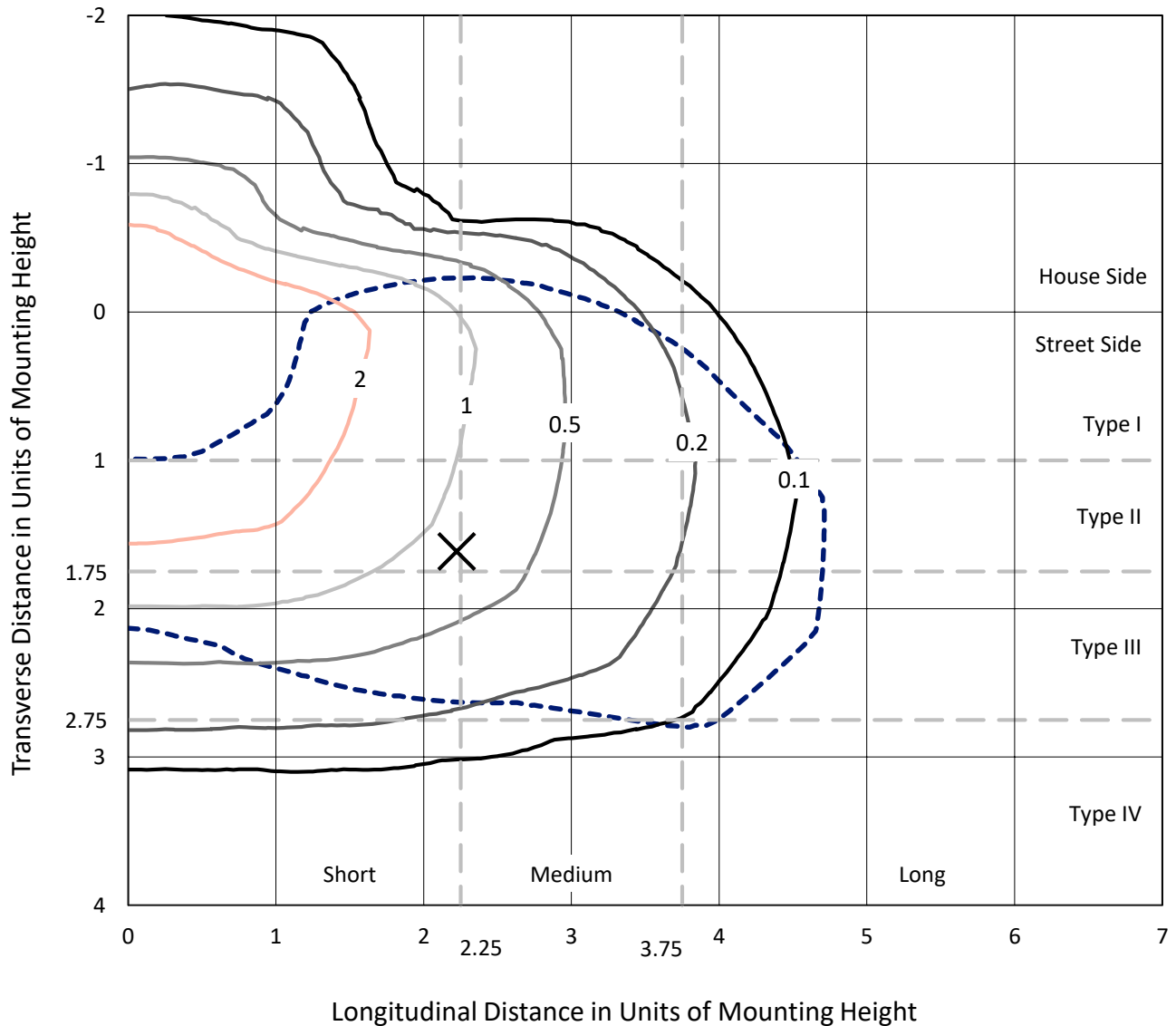
Input Watts (W): 32
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

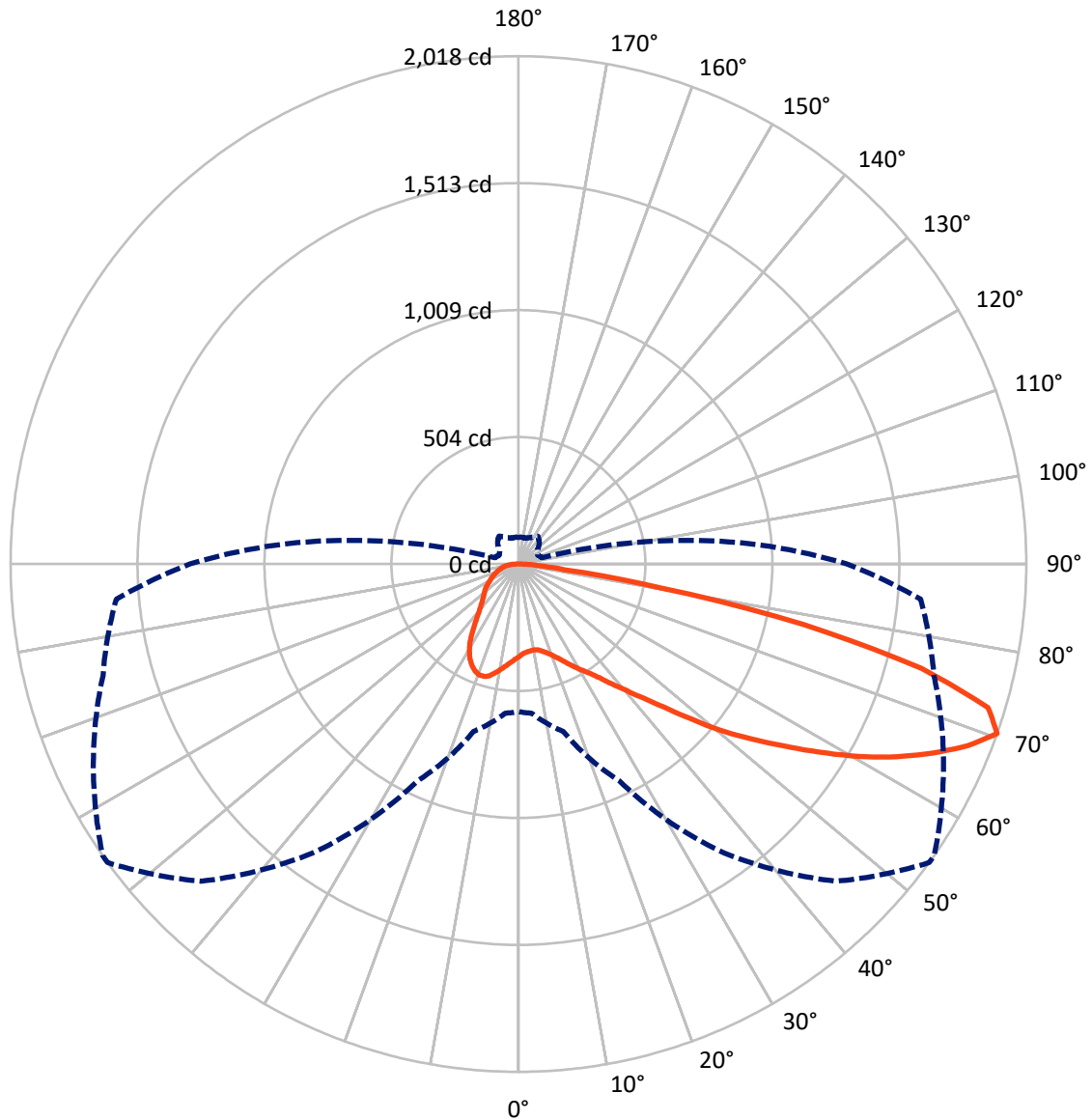


Based on 10 foot mounting height. Maximum calculated value = 4.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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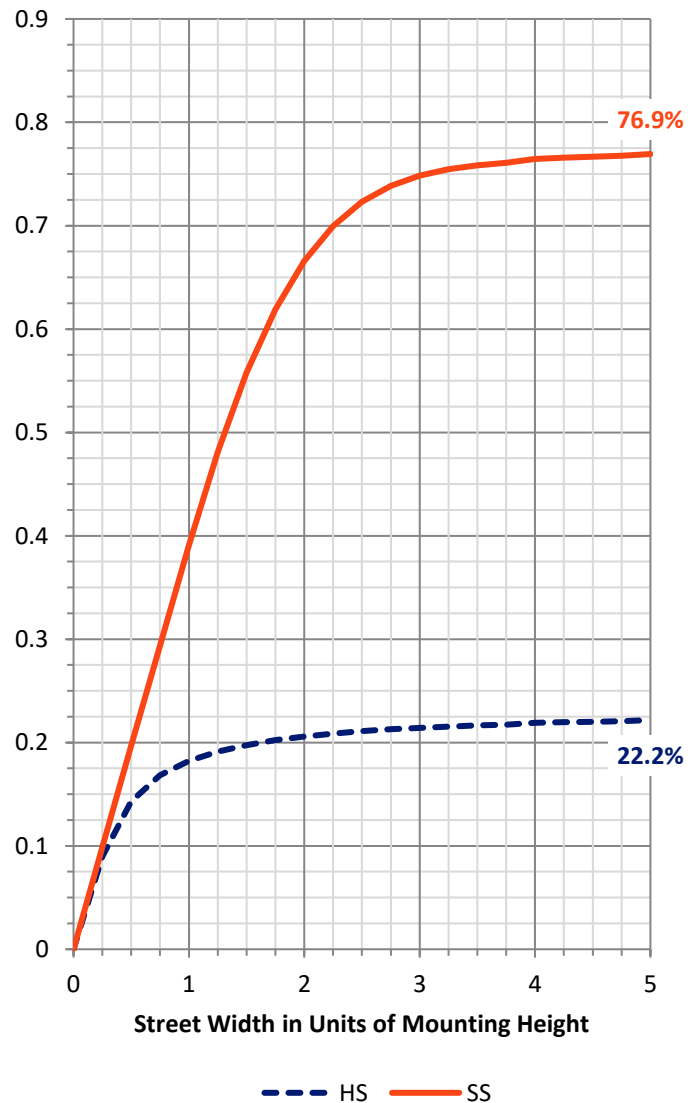
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	745.7	0.0	745.7
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	2542.3	0.0	2542.3
	% Fixture	77.3	0.0	77.3
Total	Lumens	3288.0	0.0	3288.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.1	1.1
10°-20°	115.3	3.5
20°-30°	200.4	6.1
30°-40°	292.9	8.9
40°-50°	459.7	14.0
50°-60°	706.8	21.5
60°-70°	863.6	26.3
70°-80°	535.4	16.3
80°-90°	77.8	2.4
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°	3288.0	100.0
0°-180°	3288.0	100.0



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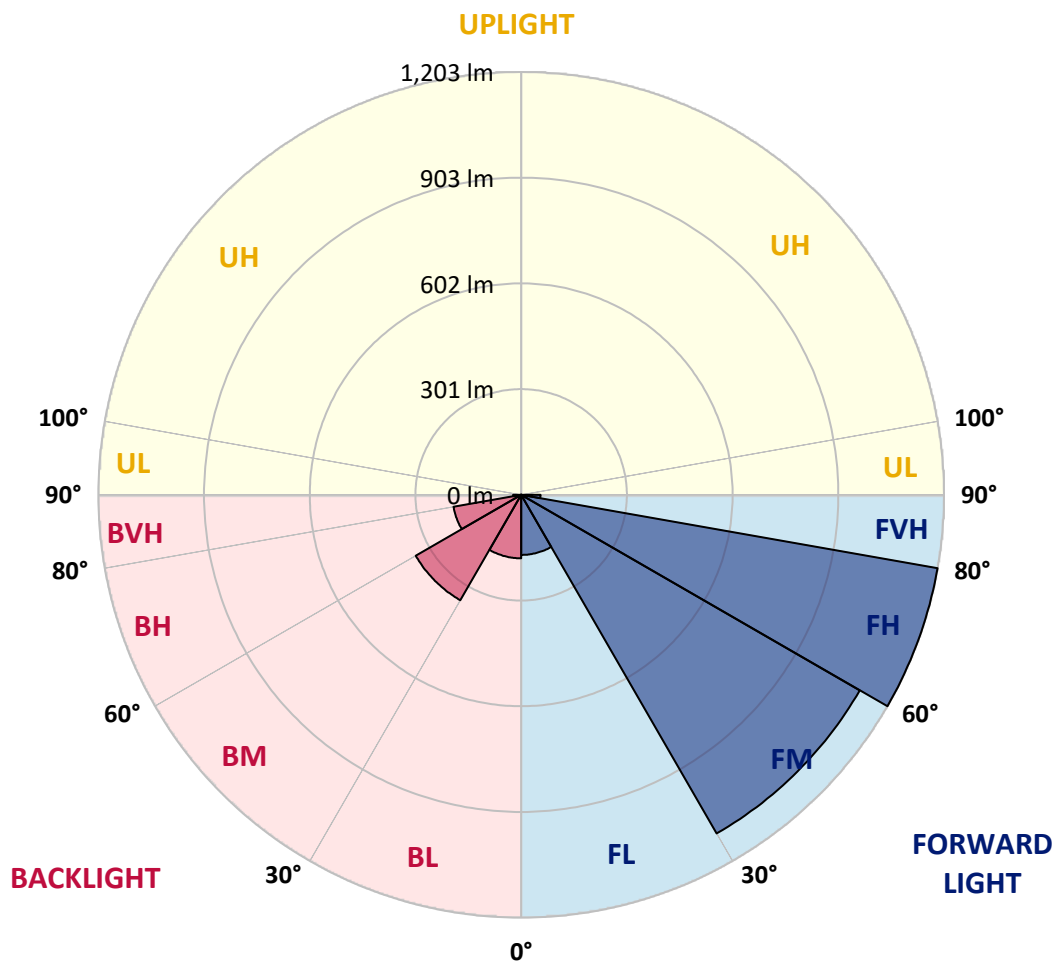
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	171.1	5.2			
FM	(30°-60°)	1112.8	33.8			
FH	(60°-80°)	1203.4	36.6			G1/1800
FVH	(80°-90°)	54.9	1.7			G1/100
BL	(0°-30°)	180.8	5.5	B1/500		
BM	(30°-60°)	346.5	10.5	B1/1000		
BH	(60°-80°)	195.5	5.9	B1/500		G1/500
BVH	(80°-90°)	22.9	0.7			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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9
2.5°	353.5	352.1	352.1	354.0	354.7	356.4	356.4	357.0	358.9	361.8	365.4
5°	342.6	342.0	342.6	344.9	346.1	349.8	351.0	351.5	355.2	360.0	365.4
7.5°	331.7	331.1	332.4	336.0	339.6	344.9	348.1	348.6	354.0	360.6	367.9
10°	328.2	327.5	329.3	332.4	336.0	342.0	346.7	347.4	355.2	363.1	373.2
12.5°	332.9	332.4	334.1	337.1	340.7	344.9	350.3	351.0	361.2	371.4	382.3
15°	344.9	344.9	345.6	347.4	351.0	354.7	359.4	360.0	370.9	382.9	393.7
17.5°	363.6	362.5	362.5	361.8	364.3	366.1	372.1	372.6	384.1	395.0	405.8
20°	386.5	385.9	383.4	380.5	380.0	381.2	387.1	387.7	399.1	408.2	418.4
22.5°	414.2	414.7	409.4	402.8	399.7	401.5	407.0	407.7	416.1	423.8	432.9
25°	450.9	449.2	441.2	431.6	425.6	425.6	431.0	431.0	438.9	443.8	449.7
27.5°	485.9	482.2	475.1	461.2	451.6	453.4	458.8	458.8	466.0	467.7	470.8
30°	523.8	520.2	511.1	493.7	481.0	479.9	486.4	485.9	495.4	494.8	492.5
32.5°	570.2	568.4	553.3	531.0	514.2	510.0	515.9	516.5	522.5	520.7	512.9
35°	635.2	634.6	620.6	581.7	559.4	551.5	555.2	555.2	559.4	554.6	541.3
37.5°	717.0	718.3	706.2	648.3	617.1	603.9	604.5	603.9	605.1	599.7	585.9
40°	799.0	801.9	801.4	731.5	691.8	668.9	660.4	659.3	662.3	659.9	646.6
42.5°	906.7	913.9	897.0	833.8	789.3	750.8	727.8	724.9	731.5	734.5	721.9
45°	1018.7	1016.3	989.8	943.9	903.7	854.3	811.0	806.1	811.0	820.1	806.8
47.5°	1077.1	1075.4	1068.7	1045.7	1039.8	983.1	917.4	913.3	904.4	916.9	901.3
50°	1173.4	1175.3	1148.2	1145.7	1171.0	1139.7	1037.9	1028.3	1012.1	1022.4	1009.1
52.5°	1243.3	1235.3	1218.6	1239.7	1318.5	1301.6	1151.2	1147.0	1131.9	1129.4	1123.4
55°	1271.6	1271.6	1274.5	1323.4	1435.9	1413.7	1273.9	1278.2	1257.6	1240.9	1248.6
57.5°	1279.9	1283.6	1309.5	1390.1	1573.8	1500.9	1409.4	1415.4	1385.9	1352.2	1376.9
60°	1238.5	1249.3	1311.3	1428.0	1651.4	1593.7	1552.1	1553.9	1511.2	1461.8	1505.1
62.5°	1131.9	1145.1	1255.9	1443.8	1638.8	1688.8	1686.9	1691.1	1632.8	1571.3	1625.6
65°	1001.3	1014.5	1132.5	1399.7	1629.2	1756.7	1810.4	1821.9	1746.6	1664.1	1700.9
67.5°	809.2	826.6	938.5	1251.7	1582.3	1812.8	1926.0	1938.1	1834.5	1712.3	1694.3
70°	586.5	594.9	688.7	951.2	1390.8	1782.1	2017.6	2016.9	1863.4	1708.7	1603.8
72.5°	282.3	289.0	370.3	590.6	994.7	1512.3	1951.3	1962.6	1823.6	1656.2	1397.4
75°	116.2	122.8	149.8	249.3	521.9	999.5	1653.9	1681.0	1656.2	1486.4	1093.3
77.5°	72.3	74.6	87.9	128.8	238.4	466.6	1157.7	1194.4	1312.5	1190.9	721.9
80°	54.2	56.0	65.7	90.3	150.6	172.1	574.9	621.3	795.3	683.3	327.0
82.5°	45.2	45.8	52.5	65.7	102.3	98.8	184.2	205.4	370.9	260.7	112.6
85°	42.1	43.4	46.9	46.9	64.9	62.1	76.4	80.0	107.7	89.1	39.2
87.5°	21.6	20.5	41.5	36.7	33.7	30.2	32.5	34.9	40.3	42.8	17.4
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°	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9
2.5°	366.7	368.5	371.4	374.5	378.0	382.3	384.7	387.7	390.1	389.0	388.3
5°	368.5	371.4	378.0	384.1	391.3	399.7	405.1	411.2	416.1	417.3	415.5
7.5°	371.4	376.8	385.9	396.7	406.5	417.3	425.6	434.2	440.1	441.2	441.2
10°	378.6	384.7	396.7	411.2	422.7	434.2	443.8	450.3	455.8	458.1	458.1
12.5°	389.0	396.2	410.5	428.0	440.7	451.6	457.0	460.0	462.4	464.9	465.4
15°	401.0	408.8	426.2	444.9	458.1	463.5	463.5	462.9	462.9	464.2	465.4
17.5°	413.0	421.5	439.5	459.4	467.7	464.9	460.7	458.8	457.5	457.0	458.8
20°	425.6	434.2	452.1	470.8	468.3	455.8	449.7	445.5	441.8	440.1	442.5
22.5°	439.5	447.4	466.0	478.6	460.7	441.2	429.8	423.2	417.3	413.6	416.1
25°	455.8	463.5	481.6	481.0	446.7	419.7	401.5	390.8	384.1	380.5	380.5
27.5°	475.1	481.6	499.1	475.1	427.5	390.8	364.3	354.0	352.1	349.3	349.3
30°	494.8	500.3	515.4	461.2	401.0	352.9	323.8	319.1	319.6	316.7	317.3
32.5°	515.4	520.7	525.0	440.7	366.7	310.1	290.8	287.2	286.6	284.1	281.8
35°	544.3	552.1	526.1	413.0	325.0	274.5	260.7	257.1	253.4	245.1	245.1
37.5°	588.2	596.7	523.3	378.6	282.3	246.9	234.2	229.3	223.4	215.0	211.9
40°	648.3	648.3	516.5	340.2	248.0	224.5	212.4	206.5	200.0	191.5	189.6
42.5°	719.5	702.7	506.4	301.0	222.8	209.6	198.6	192.1	184.2	174.6	173.5
45°	802.5	756.8	491.9	266.1	204.1	200.5	193.9	182.4	169.2	158.9	157.2
47.5°	883.3	805.6	478.1	241.5	188.5	196.9	191.5	172.1	154.1	139.6	137.9
50°	971.7	848.9	461.8	221.0	176.3	194.5	188.5	157.2	137.4	127.0	125.9
52.5°	1060.2	892.8	444.3	199.2	166.1	189.6	181.2	146.3	136.6	122.8	121.0
55°	1153.6	943.9	423.8	175.2	154.1	180.0	171.5	145.6	140.9	122.8	118.5
57.5°	1244.4	1000.6	390.8	151.8	140.9	165.6	168.0	142.1	131.8	121.6	116.8
60°	1345.0	1060.8	336.0	131.8	129.4	153.5	163.1	134.2	121.6	117.9	115.6
62.5°	1425.7	1114.9	262.5	117.9	119.8	143.9	157.2	129.4	117.4	114.4	113.7
65°	1460.6	1116.2	188.5	106.0	110.2	134.8	151.2	125.3	113.7	112.6	112.0
67.5°	1423.9	1054.8	132.5	94.5	99.9	126.4	143.3	121.0	110.2	110.9	109.6
70°	1305.2	925.3	96.9	83.7	90.3	117.4	134.8	115.6	106.0	107.2	105.3
72.5°	1092.1	721.2	77.7	74.6	82.5	107.7	126.4	109.6	99.4	99.9	96.3
75°	806.8	478.1	64.9	66.8	73.4	98.8	115.6	101.8	92.2	89.7	87.2
77.5°	479.9	245.6	53.5	58.4	65.7	87.9	103.6	92.2	84.4	80.0	78.2
80°	198.0	99.4	43.9	49.3	57.2	78.2	91.4	80.7	75.3	71.1	68.6
82.5°	79.0	48.8	34.9	40.3	48.1	68.0	80.0	71.1	65.7	62.6	56.0
85°	30.2	24.1	23.4	28.2	36.1	52.5	66.3	59.6	55.3	47.6	45.8
87.5°	12.0	10.8	10.8	13.8	20.5	33.1	47.6	41.5	43.4	34.3	34.9
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)