

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: P348621

Luminaire Tested: **ARCH-N-PA1-40-827-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348621
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-40-827-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 740mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4073 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 41
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

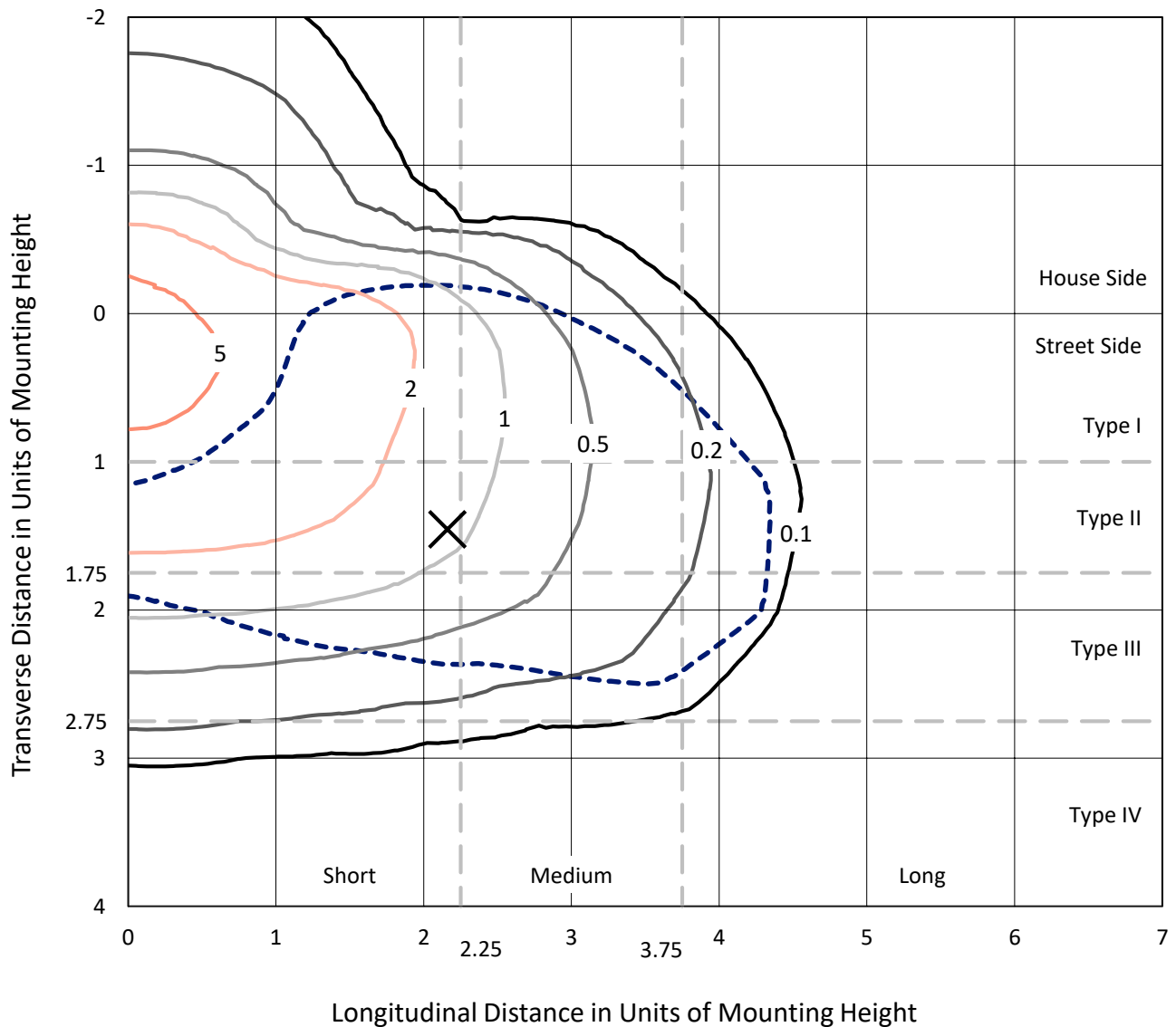


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

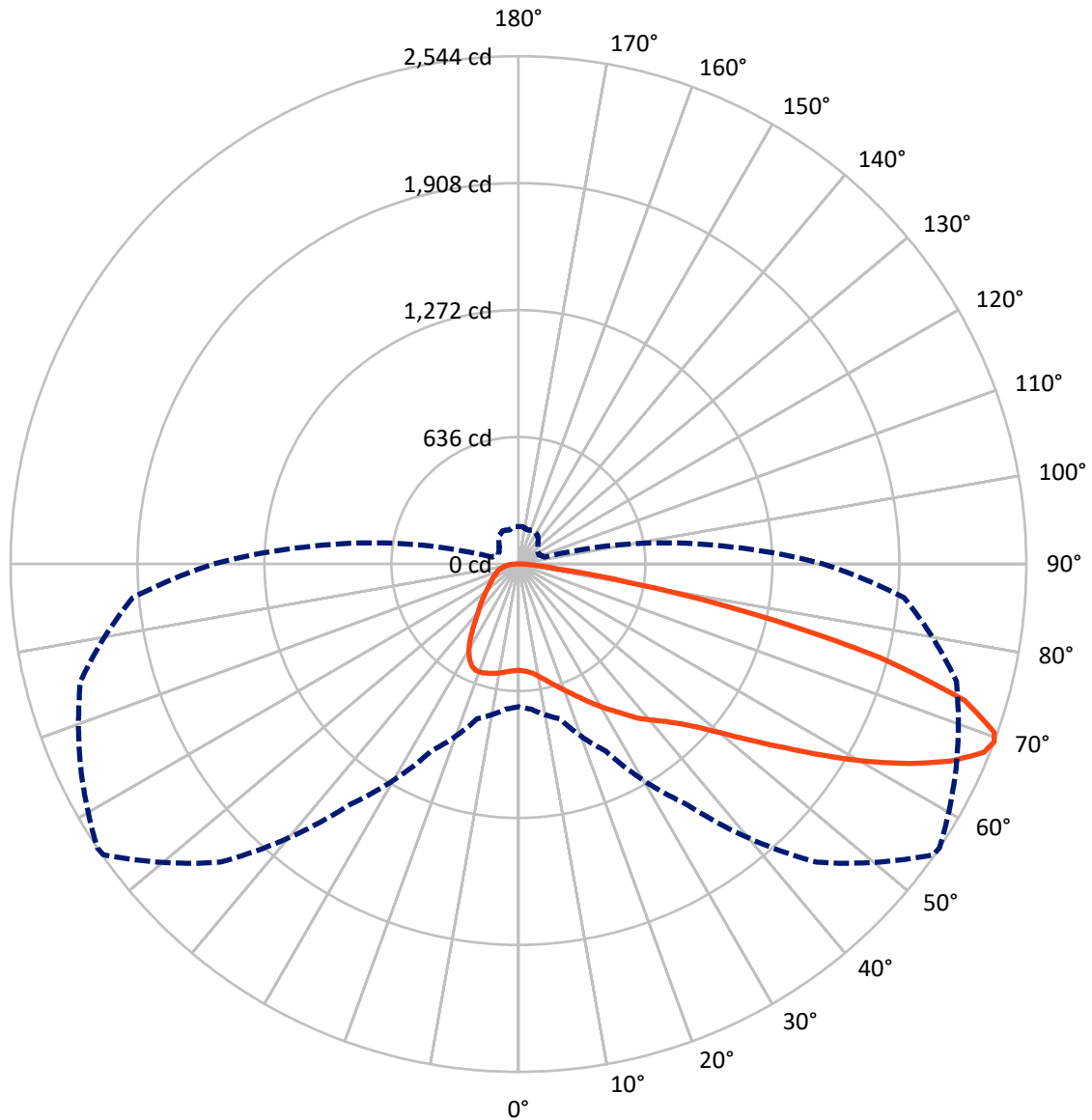


Based on 10 foot mounting height. Maximum calculated value = 5.8 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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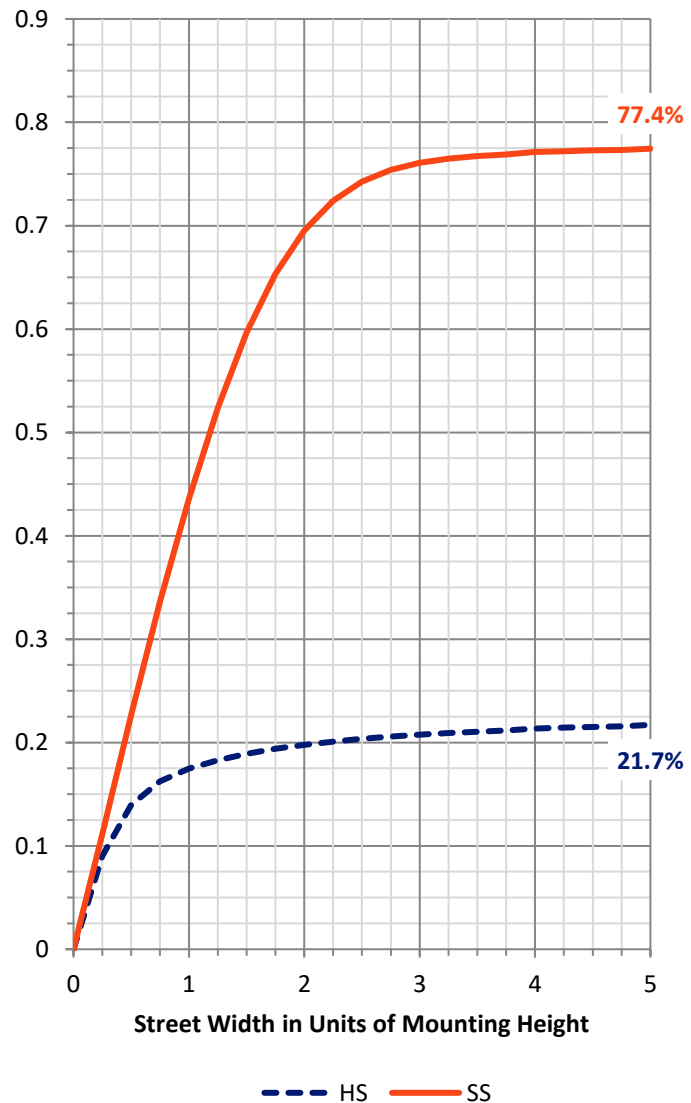
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	907.0	0.0	907.0
	% Fixture	22.3	0.0	22.3
Street Side	Lumens	3166.0	0.0	3166.0
	% Fixture	77.7	0.0	77.7
Total	Lumens	4073.0	0.0	4073.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	1.3
10°-20°	168.2	4.1
20°-30°	293.6	7.2
30°-40°	421.7	10.4
40°-50°	583.6	14.3
50°-60°	855.1	21.0
60°-70°	1042.5	25.6
70°-80°	576.3	14.2
80°-90°	79.8	2.0
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°	4073.0	100.0
0°-180°	4073.0	100.0



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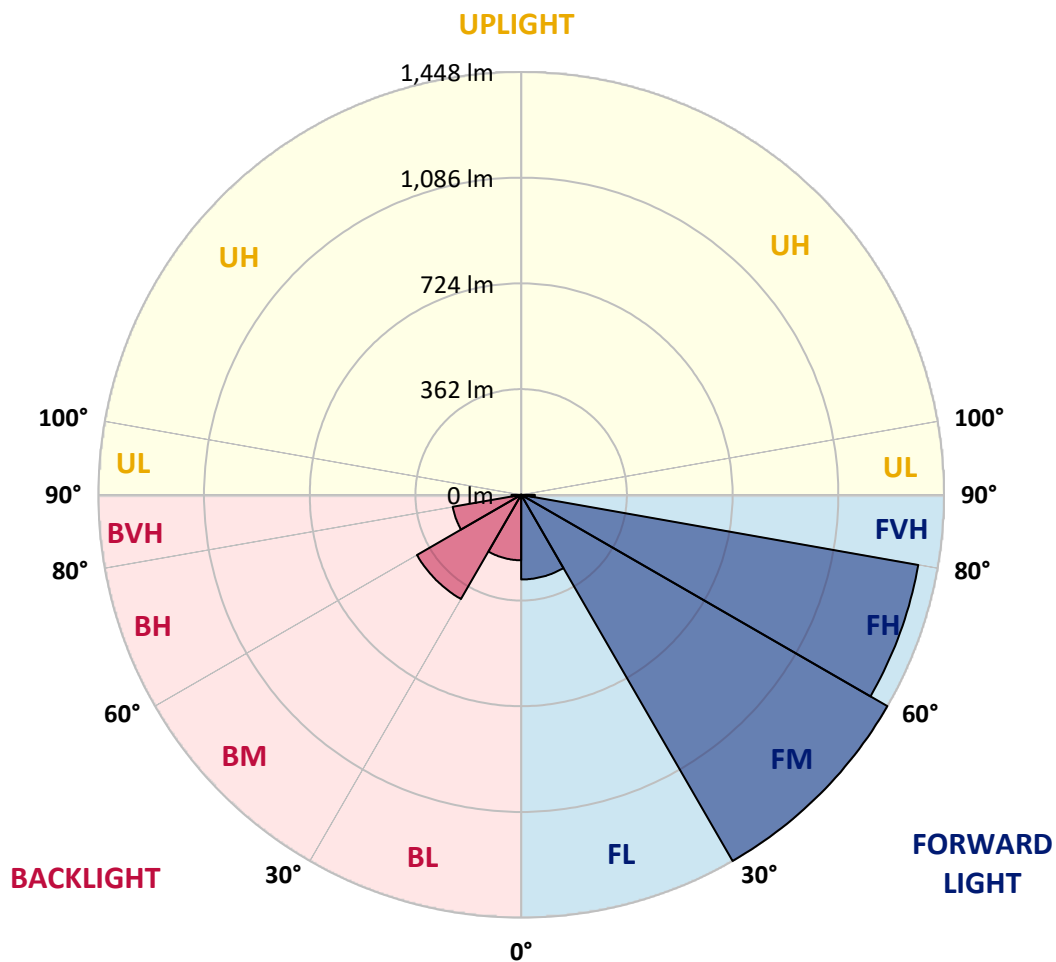
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	289.9	7.1			
FM	(30°-60°)	1448.1	35.6			
FH	(60°-80°)	1381.0	33.9			G1/1800
FVH	(80°-90°)	47.0	1.2			G1/100
BL	(0°-30°)	224.2	5.5	B1/500		
BM	(30°-60°)	412.2	10.1	B1/1000		
BH	(60°-80°)	237.9	5.8	B1/500		G1/500
BVH	(80°-90°)	32.8	0.8			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°	55°	56°	65°	75°	85°
0°	532.5	532.5	532.5	532.5	532.5	532.5	532.5	532.5	532.5	532.5	532.5
2.5°	535.9	536.4	536.0	537.1	535.9	536.7	536.0	536.0	535.6	534.3	532.9
5°	544.3	545.4	544.7	545.8	544.3	544.6	543.3	543.3	542.0	539.4	536.6
7.5°	557.5	558.7	558.2	559.3	557.2	557.2	555.5	555.4	552.8	548.5	545.3
10°	573.2	574.9	574.3	576.0	574.3	574.9	573.2	573.2	569.8	563.6	559.6
12.5°	596.0	598.1	596.6	596.5	595.8	596.9	595.5	595.2	592.1	583.7	578.1
15°	626.6	628.9	625.7	625.4	621.4	621.0	621.0	620.6	618.6	608.5	599.3
17.5°	661.9	662.6	659.7	655.3	650.2	647.0	646.6	647.7	647.7	635.9	621.2
20°	696.4	697.6	695.4	690.3	683.9	679.1	675.7	678.0	677.8	663.8	642.9
22.5°	734.0	736.9	733.6	727.1	719.5	714.2	708.3	710.3	710.4	693.1	664.2
25°	782.7	780.0	777.9	768.8	758.0	752.5	747.0	749.0	748.4	724.7	686.3
27.5°	825.7	826.3	823.5	813.8	801.3	789.3	789.0	790.2	788.1	757.5	707.0
30°	875.8	876.1	872.2	863.5	849.9	834.3	830.6	832.8	828.3	788.7	728.9
32.5°	925.6	927.0	922.7	912.2	901.2	882.3	875.0	876.4	865.2	820.5	751.5
35°	969.3	971.2	969.8	962.8	950.9	934.6	925.9	925.1	911.2	859.6	781.4
37.5°	1013.8	1015.6	1014.0	1008.1	1003.4	986.1	981.5	981.5	957.3	899.4	819.4
40°	1059.5	1062.3	1060.5	1052.3	1048.3	1040.4	1029.3	1026.7	1000.6	947.2	881.4
42.5°	1102.0	1105.7	1113.0	1108.2	1099.9	1101.0	1078.7	1077.3	1058.2	1018.0	959.3
45°	1162.3	1167.7	1180.0	1176.4	1174.7	1168.5	1142.0	1140.7	1133.4	1113.1	1056.0
47.5°	1228.1	1235.4	1257.8	1258.5	1276.6	1264.9	1228.9	1224.5	1226.2	1227.0	1174.0
50°	1288.8	1296.8	1333.4	1350.6	1393.3	1395.8	1338.2	1334.2	1340.8	1360.2	1311.5
52.5°	1337.2	1347.3	1393.0	1446.3	1519.4	1540.2	1472.7	1469.8	1474.7	1508.1	1467.0
55°	1372.7	1383.6	1433.4	1530.5	1647.3	1683.9	1627.6	1624.8	1627.9	1670.4	1636.0
57.5°	1380.9	1383.6	1455.9	1587.2	1755.2	1843.1	1817.2	1811.6	1796.4	1833.5	1822.7
60°	1342.1	1352.7	1437.4	1607.1	1838.6	2000.1	2015.3	2008.3	1965.8	1996.1	1987.4
62.5°	1263.2	1282.3	1368.2	1576.8	1871.3	2128.4	2209.6	2201.2	2128.0	2147.6	2105.8
65°	1134.4	1142.6	1232.8	1472.3	1829.8	2210.5	2382.9	2378.7	2286.5	2255.8	2127.7
67.5°	904.0	919.3	995.9	1253.8	1659.9	2200.8	2516.9	2516.5	2390.1	2295.9	2050.1
69°	714.2	730.0	803.0	1032.8	1468.8	2112.3	2539.4	2544.3	2419.3	2271.5	1939.2
70°	569.4	587.8	637.9	869.9	1299.1	1995.5	2520.7	2529.5	2413.6	2231.2	1837.0
72.5°	242.3	257.2	292.8	448.4	791.8	1490.1	2304.8	2338.2	2283.6	2042.1	1518.2
75°	105.8	110.4	126.6	182.8	351.5	811.0	1805.5	1867.3	1952.6	1726.1	1130.9
77.5°	77.5	79.4	88.3	107.3	157.7	306.3	1161.1	1197.0	1408.2	1256.1	693.7
80°	59.9	61.3	68.2	78.9	103.0	123.9	529.5	560.4	791.8	645.2	288.9
82.5°	47.7	48.7	53.5	58.1	71.1	75.1	175.8	195.0	292.3	178.2	76.5
85°	44.3	45.5	47.1	42.4	45.6	44.1	76.0	79.6	88.3	70.0	32.0
87.5°	20.1	23.7	46.7	33.0	24.3	19.4	31.1	32.6	36.6	36.8	14.2
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°	532.5	532.5	532.5	532.5	532.5	532.5	532.5	532.5	532.5	532.5	532.5
2.5°	533.7	533.3	534.0	532.3	534.4	534.3	533.6	533.9	535.3	535.1	535.3
5°	537.0	536.7	537.5	536.3	538.8	539.6	539.8	541.0	542.6	543.0	543.0
7.5°	545.1	545.1	545.5	543.8	545.5	545.4	544.7	546.0	547.5	547.6	547.5
10°	559.1	559.3	558.6	554.2	552.8	549.0	545.5	545.7	547.6	549.2	549.6
12.5°	576.8	576.3	573.2	565.2	559.3	551.6	547.9	547.8	549.7	551.0	551.4
15°	597.0	595.5	587.5	574.4	564.1	556.5	550.6	549.2	548.1	546.7	546.8
17.5°	616.1	612.6	599.3	581.2	570.2	560.1	548.8	539.6	533.3	529.7	528.6
20°	635.5	628.6	609.4	587.5	573.6	555.2	533.3	514.8	503.3	498.0	497.0
22.5°	653.2	642.1	618.8	594.1	570.9	538.7	504.3	477.3	461.3	454.2	454.8
25°	670.4	655.0	628.6	598.7	557.5	509.5	463.9	430.8	412.2	404.2	404.0
27.5°	685.6	668.0	639.3	594.9	532.3	467.9	416.0	383.8	368.3	361.4	360.3
30°	703.0	684.4	653.4	580.5	495.6	420.0	369.3	346.6	335.6	328.8	327.5
32.5°	724.1	706.8	665.1	554.2	448.6	369.9	332.8	317.0	307.0	299.3	297.9
35°	755.0	736.2	668.0	516.6	396.9	330.3	306.0	289.7	276.3	266.3	265.3
37.5°	793.7	773.1	661.3	467.9	346.9	304.6	283.7	263.6	246.1	232.1	229.8
40°	849.6	818.4	642.6	411.8	309.9	284.8	262.0	239.1	217.3	200.9	197.7
42.5°	916.7	871.6	614.0	356.0	282.9	264.8	240.4	212.0	191.2	179.6	177.9
45°	1002.0	926.9	574.3	307.1	256.2	244.7	217.1	191.0	178.1	169.5	168.1
47.5°	1099.3	988.9	532.6	267.4	233.6	225.9	198.4	181.6	171.3	164.6	163.3
50°	1219.0	1058.9	488.4	234.9	210.9	203.3	189.6	176.4	168.2	163.0	161.8
52.5°	1354.0	1137.9	456.6	209.2	192.1	186.6	184.9	173.6	167.0	163.0	161.8
55°	1499.4	1218.3	422.2	187.6	175.8	177.4	181.8	173.8	169.4	164.6	162.8
57.5°	1644.9	1301.4	383.9	169.4	162.9	170.5	179.7	174.4	170.6	166.0	164.3
60°	1759.9	1354.0	324.5	154.1	152.7	162.9	174.7	170.2	165.3	165.4	165.1
62.5°	1813.7	1351.2	259.0	140.5	142.4	152.7	166.6	163.6	159.5	165.0	165.4
65°	1783.5	1283.9	201.6	128.1	131.5	142.0	158.1	160.4	161.8	172.3	173.7
67.5°	1656.9	1152.8	156.2	117.3	121.5	134.7	159.0	174.7	176.5	187.6	187.5
69°	1526.0	1029.9	135.7	111.7	116.6	136.5	169.9	183.8	176.9	188.7	187.0
70°	1416.3	932.7	124.7	107.9	114.4	139.8	177.2	183.7	174.8	184.9	182.1
72.5°	1090.8	671.0	105.8	100.9	106.8	133.7	179.3	179.6	169.9	171.9	167.1
75°	748.1	424.0	92.3	91.3	95.3	120.5	172.6	171.6	157.1	154.3	150.4
77.5°	412.5	215.4	78.4	82.2	84.9	106.8	156.9	155.5	143.5	137.6	136.2
80°	159.1	94.3	66.2	73.1	74.8	92.5	137.5	136.2	126.3	118.7	116.6
82.5°	60.1	49.4	54.7	63.3	62.7	76.3	116.5	115.8	106.1	95.0	91.6
85°	27.8	29.6	43.4	52.2	48.1	56.5	93.2	94.4	82.6	69.5	69.5
87.5°	11.8	16.6	30.7	39.4	32.4	38.2	68.3	65.2	59.9	41.5	39.0
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)