

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: P214673

Luminaire Tested: **ARCH-AF24-40-D-U-T2R-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214673
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-40-D-U-T2R-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3979 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 40
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

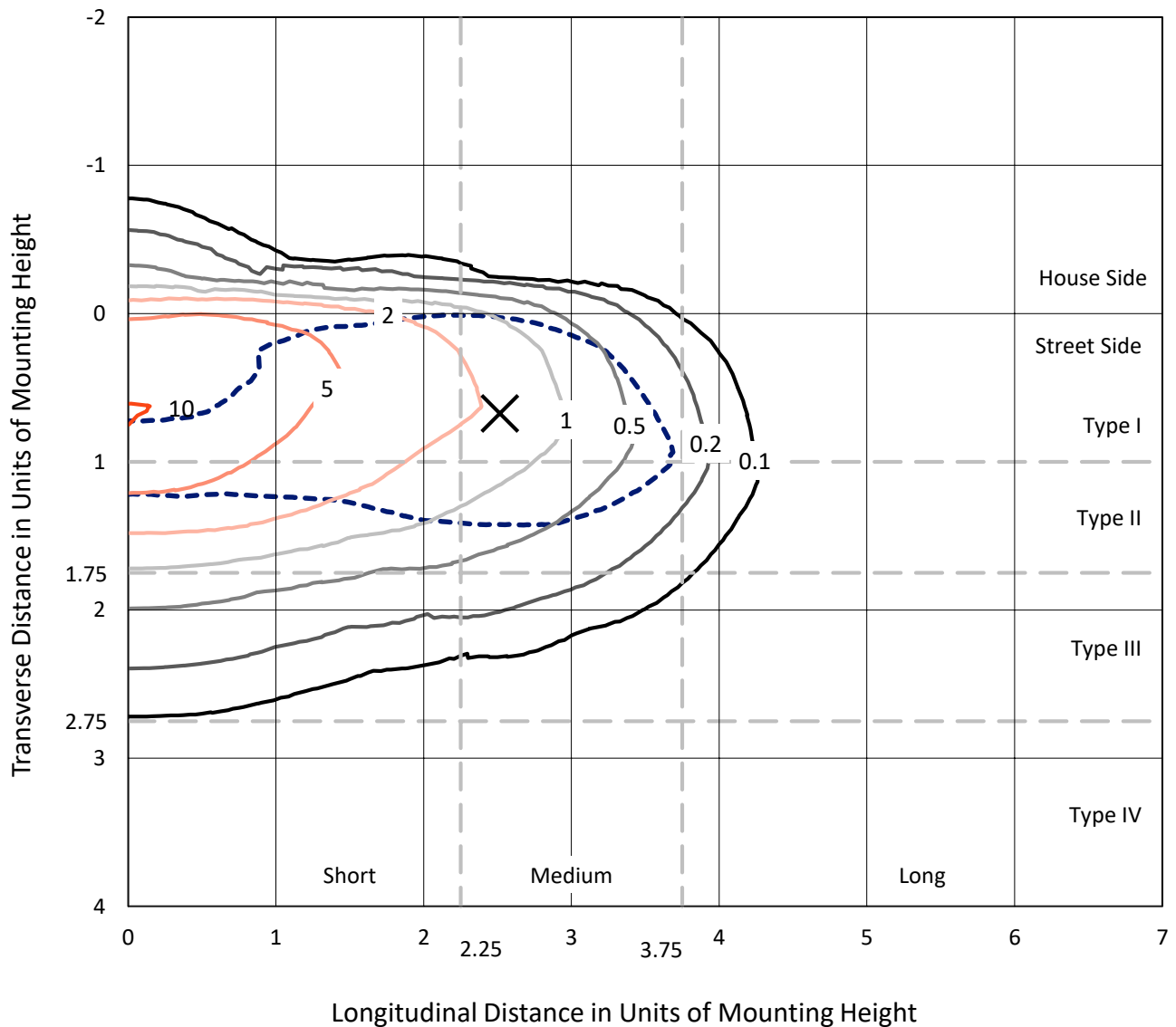


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

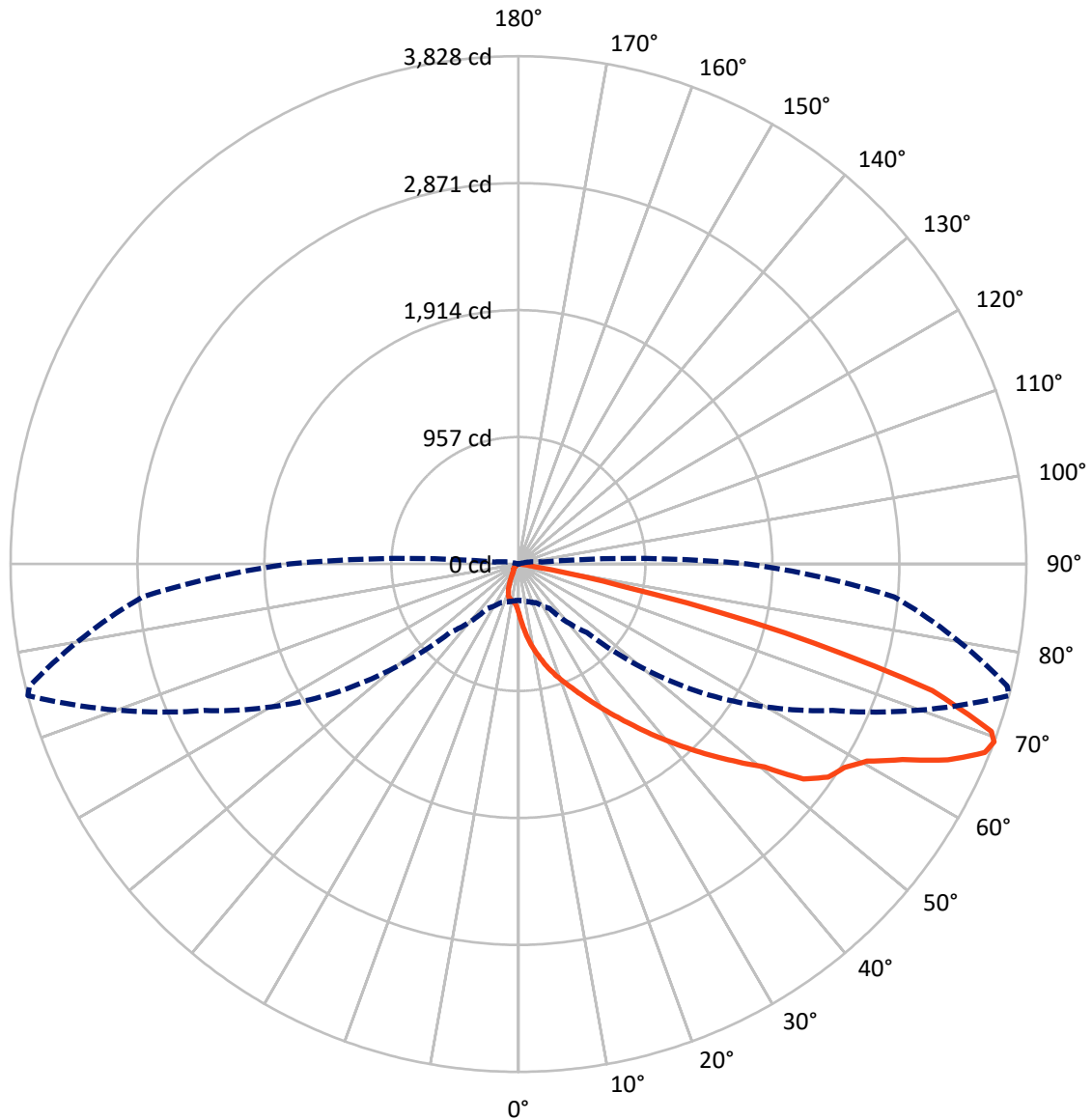


Based on 10 foot mounting height. Maximum calculated value = 10.1 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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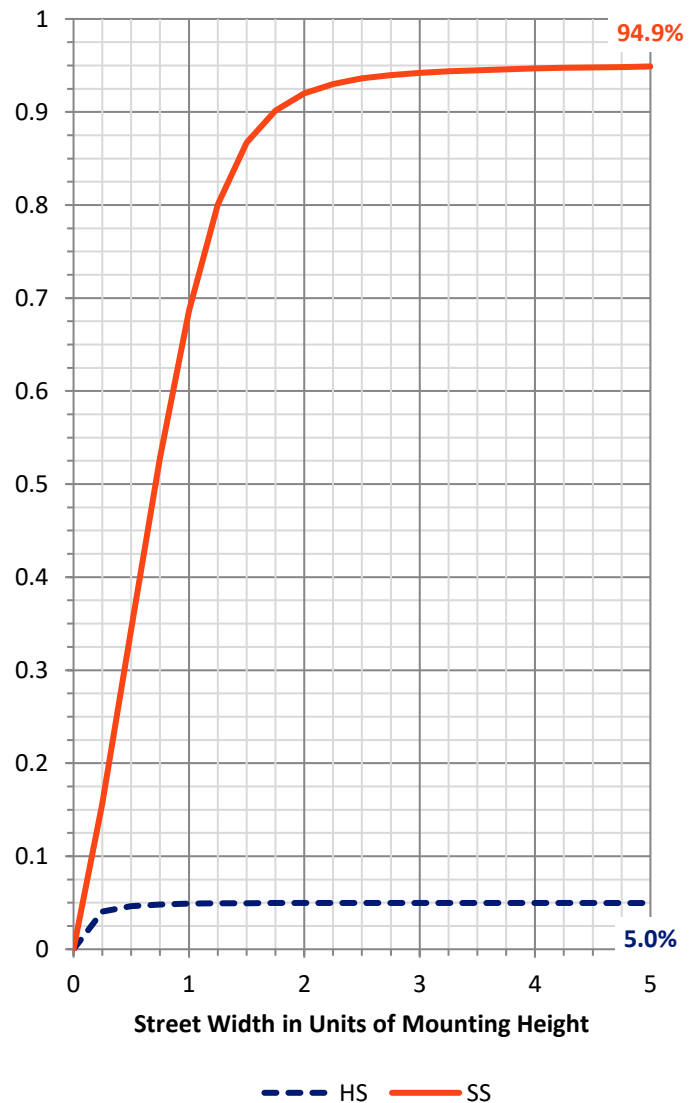
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	198.5	0.0	198.5
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	3780.5	0.0	3780.5
	% Fixture	95.0	0.0	95.0
Total	Lumens	3979.0	0.0	3979.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	1.1
10°-20°	154.3	3.9
20°-30°	294.7	7.4
30°-40°	528.6	13.3
40°-50°	809.8	20.4
50°-60°	941.2	23.7
60°-70°	833.4	20.9
70°-80°	359.5	9.0
80°-90°	14.4	0.4
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°	3979.0	100.0
0°-180°	3979.0	100.0

Coefficient of Utilization



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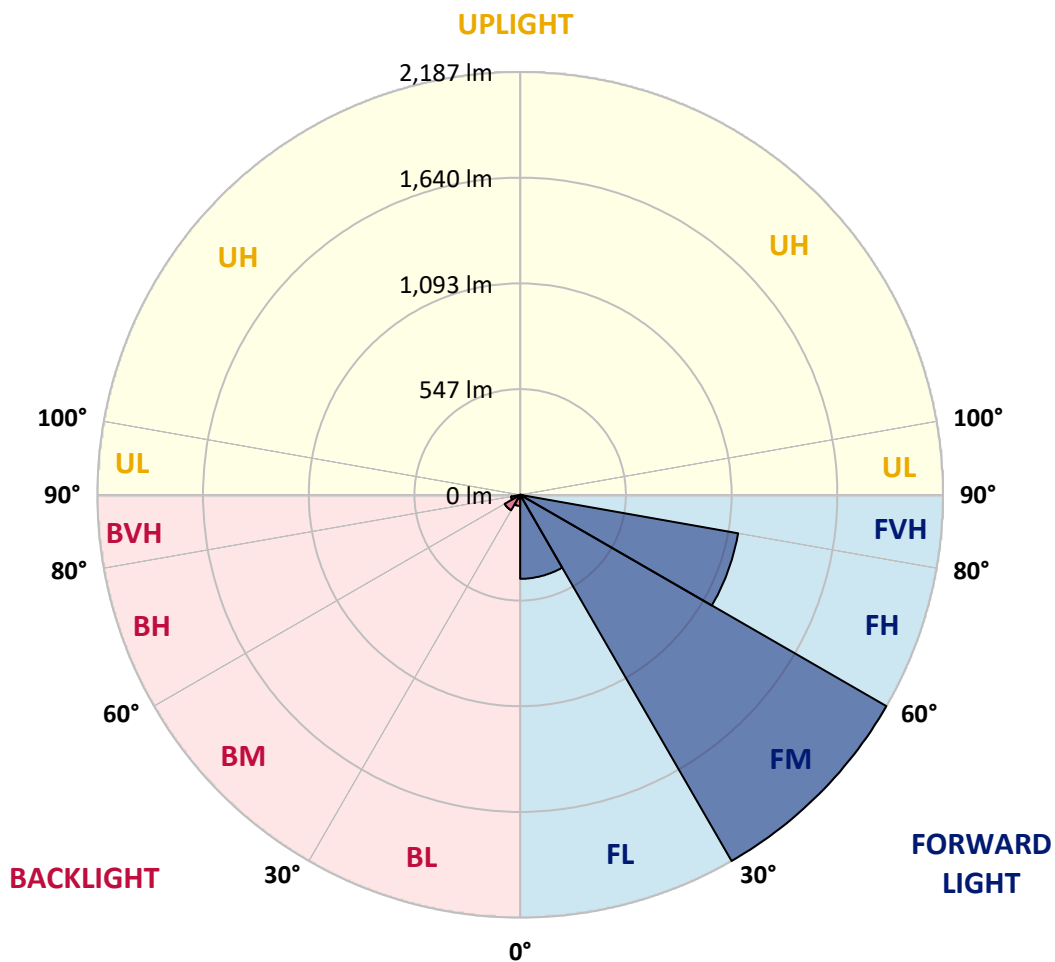
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	434.5	10.9			
FM (30°-60°)	2187.0	55.0			
FH (60°-80°)	1144.8	28.8			G1/1800
FVH (80°-90°)	14.2	0.4			G1/100
BL (0°-30°)	57.7	1.4	B0/110		
BM (30°-60°)	92.6	2.3	B0/220		
BH (60°-80°)	48.1	1.2	B0/110		G0/110
BVH (80°-90°)	0.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	370.2	370.2	370.2	370.2	370.2	370.2	370.2	370.2	370.2	370.2	370.2
2.5°	609.9	603.9	597.9	591.0	575.6	548.9	515.4	479.3	434.7	426.9	390.9
5°	740.5	737.9	731.9	722.4	705.3	676.1	638.3	585.0	510.3	497.4	420.9
7.5°	832.4	830.7	825.5	814.4	798.9	769.7	730.2	672.6	585.9	571.3	458.7
10°	914.9	914.0	909.7	899.4	883.9	852.2	810.1	749.9	658.0	641.7	502.5
12.5°	989.6	990.5	988.8	983.6	972.4	942.4	894.3	829.0	727.6	709.6	554.9
15°	1033.4	1036.0	1042.9	1053.2	1056.6	1032.6	982.7	910.6	798.9	783.4	615.1
17.5°	1018.8	1021.4	1042.9	1078.1	1111.6	1115.0	1070.4	987.9	869.3	853.9	674.3
20°	983.6	987.0	1009.4	1057.5	1122.8	1168.3	1150.2	1072.1	936.3	917.5	731.0
22.5°	1023.1	1023.1	1030.0	1059.2	1118.5	1189.8	1213.8	1156.3	1005.1	981.9	787.7
25°	1158.8	1156.3	1141.7	1129.6	1148.5	1212.1	1261.9	1242.2	1085.8	1059.2	847.9
27.5°	1330.6	1342.7	1315.2	1271.4	1228.4	1255.9	1304.9	1327.2	1175.2	1147.7	909.7
30°	1523.1	1528.2	1495.6	1437.2	1361.6	1334.9	1355.6	1400.2	1272.2	1242.2	974.1
32.5°	1696.6	1692.3	1664.8	1603.8	1510.2	1452.6	1420.8	1458.6	1377.9	1343.5	1040.3
35°	1850.4	1853.8	1820.3	1749.9	1657.9	1596.9	1521.4	1524.8	1496.4	1456.9	1116.7
37.5°	1988.7	1982.7	1950.9	1880.4	1797.1	1731.0	1651.1	1593.5	1626.2	1584.9	1202.7
40°	2101.2	2095.2	2061.7	1993.0	1914.8	1860.7	1798.0	1685.4	1762.7	1715.5	1294.6
42.5°	2190.5	2183.7	2155.3	2089.2	2013.6	1965.5	1935.4	1798.8	1908.8	1861.5	1397.7
45°	2234.4	2228.3	2211.2	2161.3	2095.2	2053.1	2067.7	1929.4	2065.1	2025.6	1511.0
47.5°	2182.8	2180.2	2200.0	2191.4	2153.6	2131.3	2182.0	2072.0	2229.2	2190.5	1641.6
50°	2026.5	2030.8	2088.3	2159.6	2177.7	2204.3	2275.6	2222.3	2405.3	2364.1	1791.9
52.5°	1640.8	1670.0	1843.5	2015.3	2148.4	2249.0	2385.5	2437.1	2692.2	2651.8	2026.5
55°	1225.0	1237.0	1426.0	1719.8	2030.8	2245.5	2467.2	2563.4	2834.0	2792.7	2088.3
57.5°	971.6	975.9	1069.5	1369.3	1788.5	2168.2	2510.1	2608.9	2895.8	2861.4	2180.2
60°	762.8	768.0	835.8	1042.0	1447.5	1959.5	2448.3	2648.4	3016.9	2989.4	2340.9
62.5°	593.6	598.7	640.0	761.1	1085.8	1638.2	2323.7	2712.0	3247.2	3234.3	2603.7
65°	459.6	461.3	489.7	546.3	767.1	1290.3	2171.6	2771.2	3558.1	3547.0	2816.8
67.5°	339.3	341.9	361.7	396.9	518.0	926.9	1922.5	2725.7	3792.6	3760.0	2894.1
69°	274.0	276.6	293.8	322.1	408.9	730.2	1694.9	2613.2	3827.9	3796.9	2845.1
70°	234.5	236.2	253.4	277.5	348.8	620.2	1514.5	2516.1	3781.5	3751.4	2733.5
72.5°	150.3	158.9	176.1	191.6	231.1	410.6	1022.3	2086.6	3262.6	3211.1	2140.7
75°	83.3	85.9	116.8	135.7	153.8	267.2	568.7	1301.4	2075.4	2039.4	1145.1
77.5°	68.7	70.4	82.5	103.1	103.1	149.5	214.8	512.8	789.5	712.1	310.1
80°	48.1	49.8	62.7	67.9	73.9	84.2	69.6	112.5	122.0	108.2	46.4
82.5°	33.5	35.2	43.0	55.8	59.3	39.5	25.8	33.5	35.2	35.2	18.0
85°	6.0	8.6	31.8	46.4	35.2	12.0	14.6	12.0	11.2	12.0	4.3
87.5°	0.0	0.0	19.8	22.3	18.9	5.2	6.0	4.3	2.6	3.4	1.7
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°	370.2	370.2	370.2	370.2	370.2	370.2	370.2	370.2	370.2	370.2	370.2
2.5°	372.8	354.8	323.9	301.5	282.6	268.0	262.0	252.6	245.7	249.1	244.8
5°	383.1	351.3	301.5	269.7	247.4	228.5	213.0	201.0	191.6	189.8	188.1
7.5°	399.5	353.9	288.6	249.1	215.6	186.4	162.4	144.3	130.6	130.6	125.4
10°	421.8	360.8	280.9	228.5	178.7	139.2	115.1	97.9	91.1	90.2	88.5
12.5°	452.7	373.7	274.9	201.9	139.2	101.4	86.8	80.7	78.2	77.3	76.5
15°	494.8	392.6	268.0	169.2	105.7	83.3	77.3	72.2	69.6	68.7	67.9
17.5°	535.2	409.8	253.4	135.7	85.9	75.6	68.7	64.4	61.0	60.1	60.1
20°	573.0	424.4	228.5	105.7	77.3	67.9	61.0	55.8	52.4	51.5	51.5
22.5°	612.5	436.4	197.6	85.9	70.4	60.1	53.3	48.1	44.7	43.8	43.0
25°	654.6	445.0	162.4	76.5	63.6	53.3	45.5	41.2	38.7	37.8	36.9
27.5°	700.1	448.4	128.9	69.6	55.8	46.4	39.5	35.2	33.5	32.6	32.6
30°	741.3	445.0	99.6	61.9	49.0	40.4	34.4	30.9	29.2	28.3	28.3
32.5°	784.3	436.4	79.9	55.0	43.0	34.4	29.2	26.6	25.8	24.9	24.9
35°	829.8	425.2	68.7	49.0	36.9	30.1	25.8	24.1	23.2	22.3	22.3
37.5°	883.1	411.5	62.7	43.8	32.6	26.6	22.3	21.5	20.6	20.6	20.6
40°	943.2	394.3	58.4	39.5	29.2	23.2	19.8	18.9	18.0	18.0	18.0
42.5°	1006.8	374.5	54.1	35.2	25.8	19.8	17.2	17.2	16.3	16.3	15.5
45°	1078.1	354.8	49.8	30.9	22.3	17.2	14.6	13.7	13.7	12.9	12.9
47.5°	1162.3	336.7	45.5	27.5	19.8	14.6	12.9	12.0	11.2	10.3	10.3
50°	1280.8	335.0	40.4	24.1	18.0	12.0	10.3	9.4	8.6	7.7	7.7
52.5°	1398.5	319.6	34.4	19.8	14.6	10.3	7.7	6.9	6.0	6.0	5.2
55°	1425.1	293.8	30.1	17.2	11.2	7.7	6.0	4.3	4.3	3.4	3.4
57.5°	1483.6	281.8	25.8	13.7	8.6	6.0	3.4	2.6	2.6	2.6	2.6
60°	1598.7	278.3	22.3	12.0	6.0	4.3	2.6	1.7	1.7	0.9	0.9
62.5°	1757.6	274.9	18.9	10.3	4.3	2.6	1.7	0.9	0.0	0.0	0.0
65°	1845.2	251.7	15.5	7.7	3.4	2.6	0.9	0.0	0.0	0.0	0.0
67.5°	1822.0	207.9	13.7	5.2	2.6	1.7	0.9	0.0	0.0	0.0	0.0
69°	1724.9	175.2	11.2	4.3	2.6	1.7	0.9	0.0	0.0	0.0	0.0
70°	1608.1	151.2	10.3	3.4	1.7	0.9	0.9	0.0	0.0	0.0	0.0
72.5°	1141.7	79.0	6.9	2.6	1.7	0.9	0.0	0.0	0.0	0.0	0.0
75°	533.5	35.2	4.3	1.7	0.9	0.9	0.0	0.0	0.0	0.0	0.0
77.5°	117.7	16.3	2.6	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	22.3	6.0	1.7	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.7	2.6	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.0	0.0	0.0	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

(END OF REPORT)