

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: P214645

Luminaire Tested: **ARCH-AF24-40-D-U-T2R-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214645
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-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 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: 3522 lumens
Efficiency: N/A
Efficacy: 88.0 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

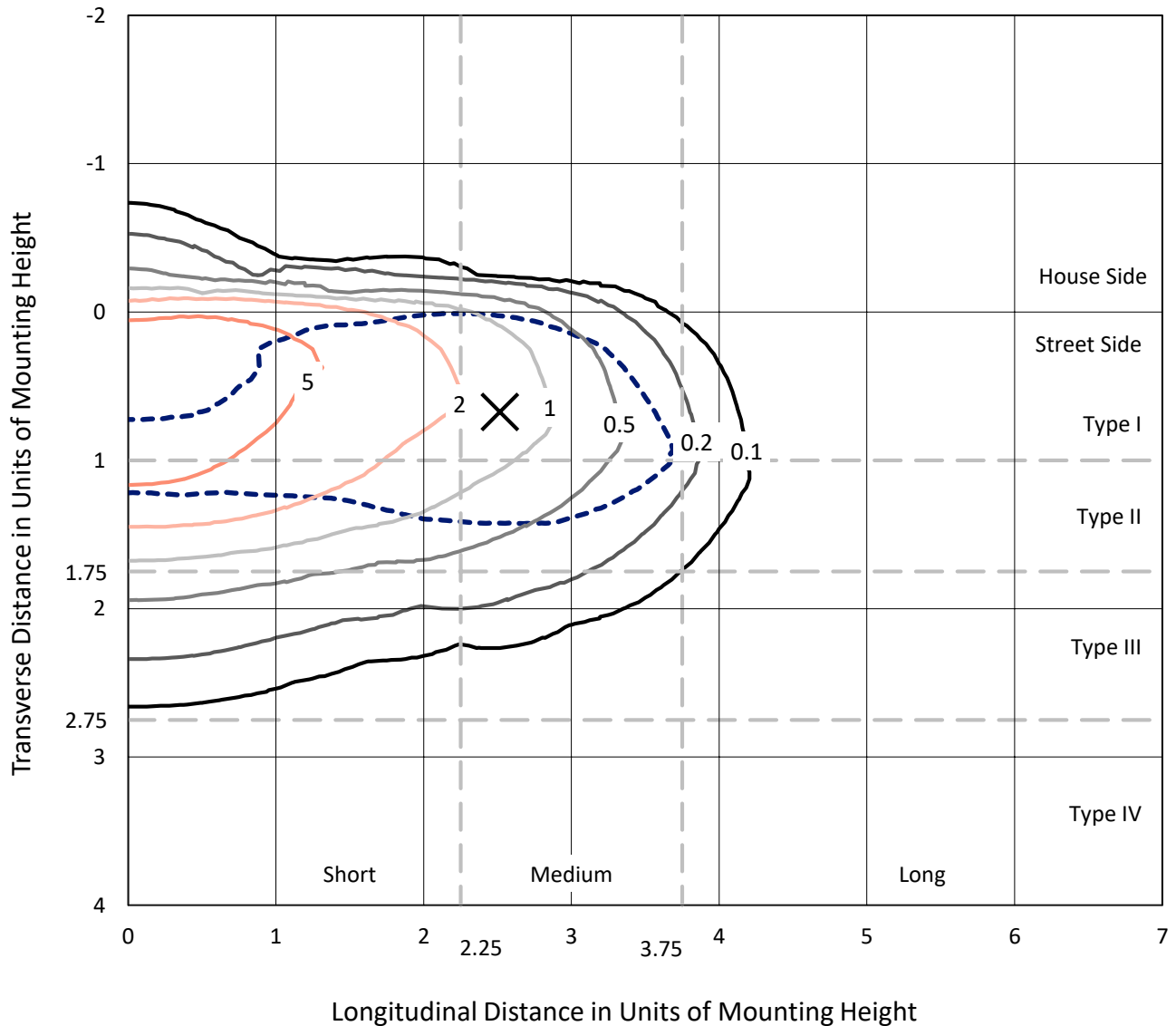


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

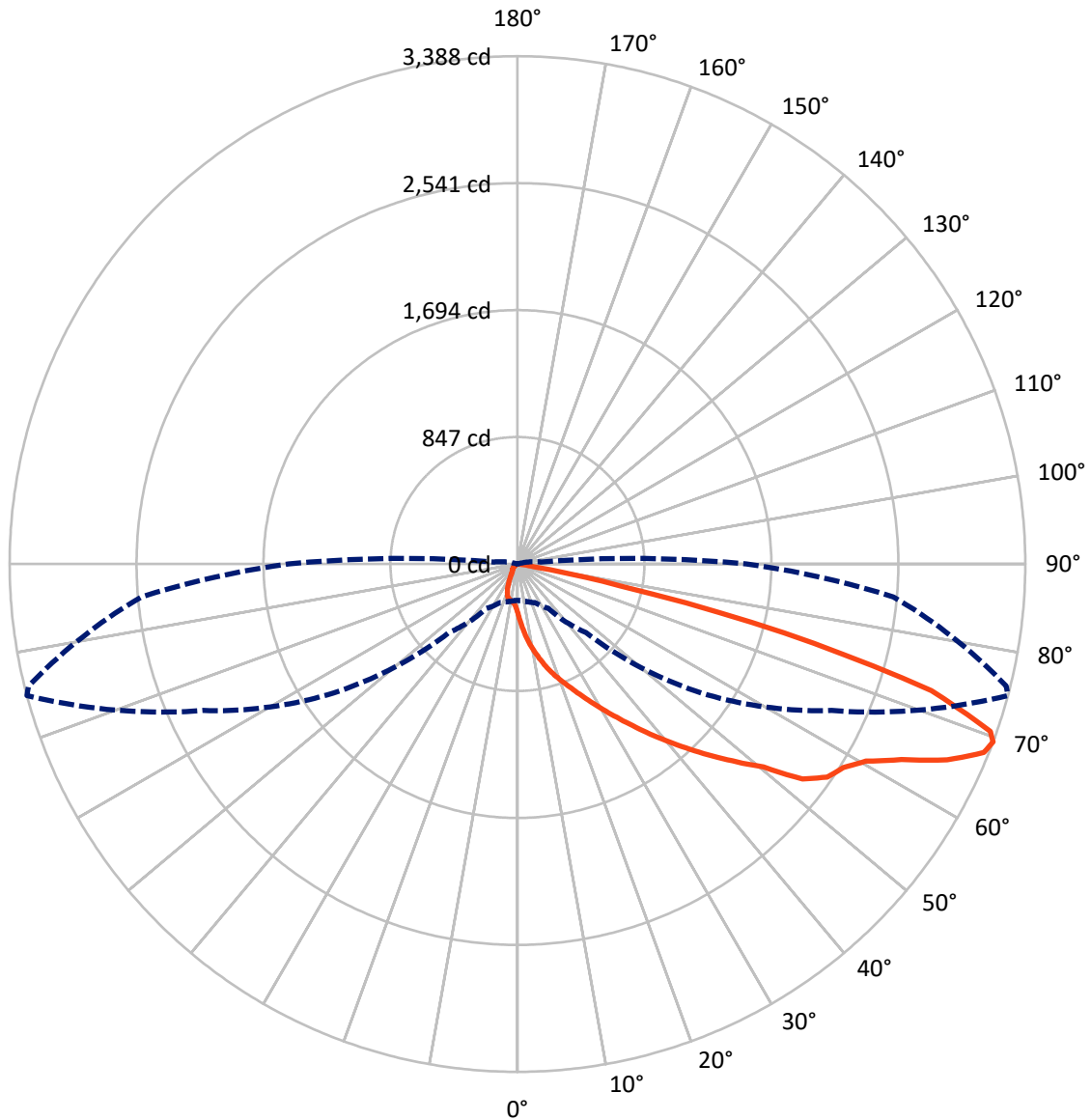


Based on 10 foot mounting height. Maximum calculated value = 9 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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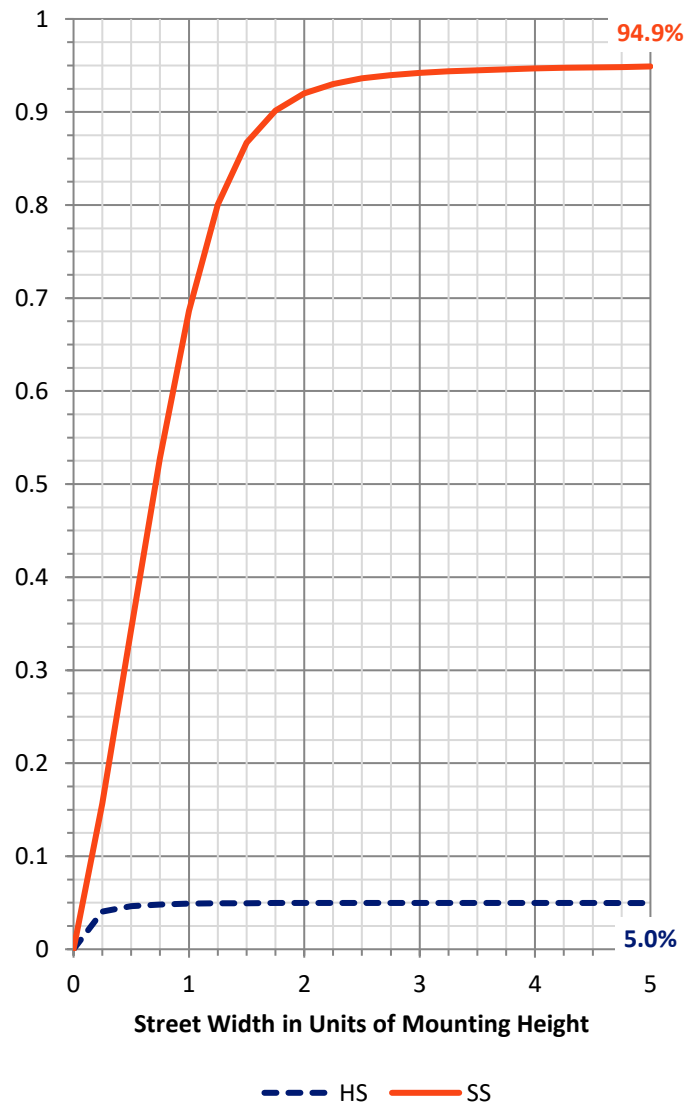
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	175.7	0.0	175.7
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	3346.3	0.0	3346.3
	% Fixture	95.0	0.0	95.0
Total	Lumens	3522.0	0.0	3522.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.2	1.1
10°-20°	136.6	3.9
20°-30°	260.8	7.4
30°-40°	467.8	13.3
40°-50°	716.8	20.4
50°-60°	833.1	23.7
60°-70°	737.7	20.9
70°-80°	318.2	9.0
80°-90°	12.8	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°	3522.0	100.0
0°-180°	3522.0	100.0



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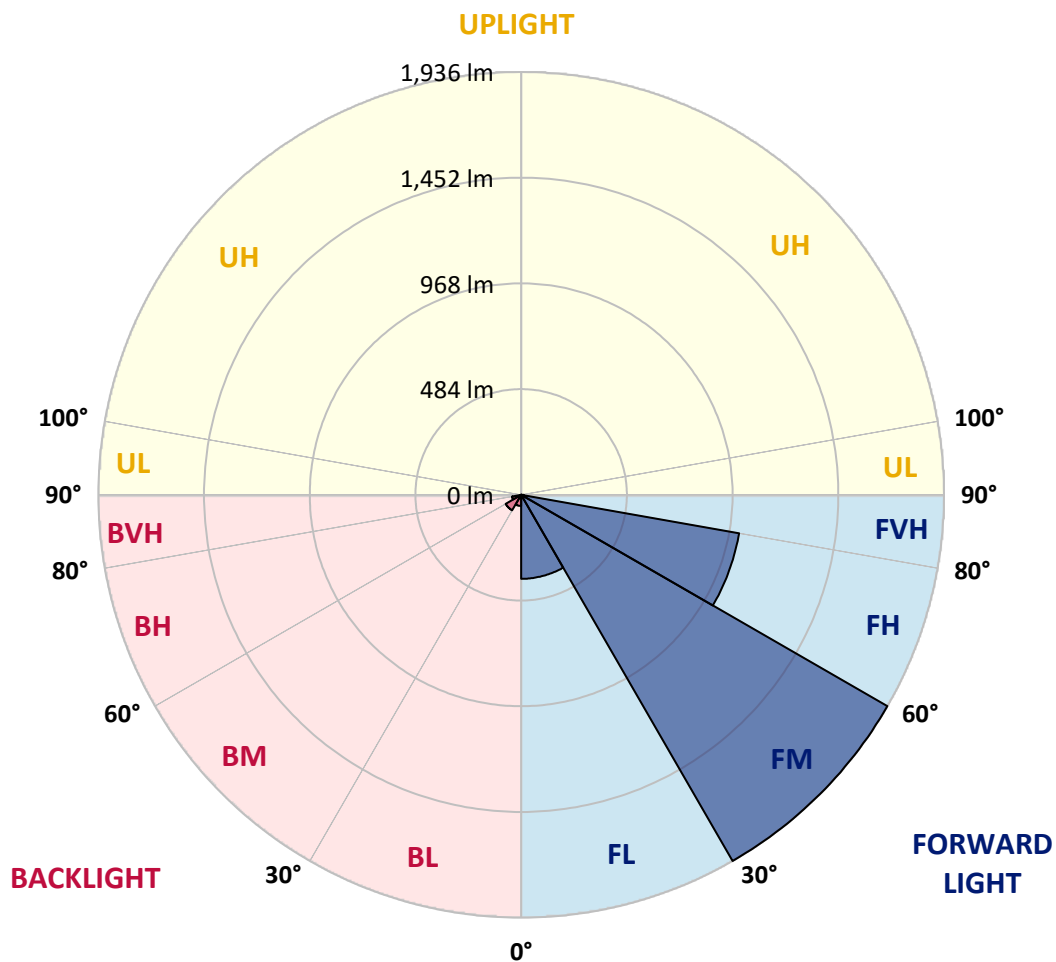
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	384.6	10.9			
FM	(30°-60°)	1935.8	55.0			
FH	(60°-80°)	1013.3	28.8			G1/1800
FVH	(80°-90°)	12.6	0.4			G1/100
BL	(0°-30°)	51.0	1.4	B0/110		
BM	(30°-60°)	81.9	2.3	B0/220		
BH	(60°-80°)	42.6	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°	327.7	327.7	327.7	327.7	327.7	327.7	327.7	327.7	327.7	327.7	327.7
2.5°	539.9	534.5	529.2	523.1	509.4	485.9	456.2	424.3	384.7	377.9	346.0
5°	655.4	653.2	647.8	639.5	624.3	598.4	565.0	517.8	451.7	440.3	372.6
7.5°	736.8	735.3	730.7	720.8	707.1	681.3	646.3	595.4	518.6	505.6	406.0
10°	809.8	809.0	805.2	796.1	782.4	754.3	717.0	663.8	582.4	568.0	444.8
12.5°	875.9	876.7	875.2	870.6	860.7	834.1	791.5	733.8	644.0	628.1	491.2
15°	914.7	917.0	923.1	932.2	935.3	914.0	869.9	806.0	707.1	693.5	544.4
17.5°	901.8	904.1	923.1	954.3	983.9	987.0	947.4	874.4	769.5	755.8	596.9
20°	870.6	873.7	893.4	936.0	993.8	1034.1	1018.1	948.9	828.8	812.1	647.1
22.5°	905.6	905.6	911.7	937.5	990.0	1053.1	1074.4	1023.5	889.6	869.1	697.3
25°	1025.7	1023.5	1010.5	999.9	1016.6	1072.9	1117.0	1099.5	961.1	937.5	750.5
27.5°	1177.8	1188.5	1164.1	1125.4	1087.3	1111.7	1155.0	1174.8	1040.2	1015.9	805.2
30°	1348.1	1352.7	1323.8	1272.1	1205.2	1181.6	1199.9	1239.4	1126.1	1099.5	862.3
32.5°	1501.7	1497.9	1473.6	1419.6	1336.7	1285.8	1257.7	1291.1	1219.6	1189.2	920.8
35°	1637.8	1640.9	1611.2	1548.9	1467.5	1413.5	1346.6	1349.7	1324.6	1289.6	988.5
37.5°	1760.3	1754.9	1726.8	1664.5	1590.7	1532.2	1461.4	1410.5	1439.4	1402.9	1064.5
40°	1859.9	1854.5	1824.9	1764.1	1694.9	1647.0	1591.5	1491.9	1560.3	1518.5	1145.9
42.5°	1939.0	1932.9	1907.8	1849.2	1782.3	1739.7	1713.1	1592.2	1689.5	1647.7	1237.1
45°	1977.7	1972.4	1957.2	1913.1	1854.5	1817.3	1830.2	1707.8	1827.9	1793.0	1337.5
47.5°	1932.1	1929.8	1947.3	1939.7	1906.3	1886.5	1931.3	1834.0	1973.2	1939.0	1453.1
50°	1793.7	1797.5	1848.5	1911.6	1927.5	1951.1	2014.2	1967.1	2129.0	2092.5	1586.1
52.5°	1452.3	1478.2	1631.8	1783.8	1901.7	1990.7	2111.6	2157.2	2383.0	2347.3	1793.7
55°	1084.3	1094.9	1262.2	1522.3	1797.5	1987.6	2183.8	2269.0	2508.5	2472.0	1848.5
57.5°	860.0	863.8	946.7	1212.0	1583.1	1919.2	2221.8	2309.3	2563.2	2532.8	1929.8
60°	675.2	679.8	739.8	922.3	1281.2	1734.4	2167.1	2344.2	2670.4	2646.1	2072.0
62.5°	525.4	530.0	566.5	673.7	961.1	1450.0	2056.8	2400.5	2874.2	2862.8	2304.7
65°	406.8	408.3	433.4	483.6	679.0	1142.1	1922.2	2453.0	3149.5	3139.6	2493.3
67.5°	300.3	302.6	320.1	351.3	458.5	820.4	1701.7	2412.7	3357.0	3328.2	2561.7
69°	242.6	244.8	260.0	285.1	361.9	646.3	1500.2	2313.1	3388.2	3360.8	2518.4
70°	207.6	209.1	224.3	245.6	308.7	549.0	1340.5	2227.1	3347.2	3320.5	2419.5
72.5°	133.1	140.7	155.9	169.6	204.5	363.5	904.8	1846.9	2887.9	2842.3	1894.8
75°	73.8	76.0	103.4	120.1	136.1	236.5	503.4	1152.0	1837.1	1805.1	1013.6
77.5°	60.8	62.4	73.0	91.2	91.2	132.3	190.1	453.9	698.8	630.3	274.5
80°	42.6	44.1	55.5	60.1	65.4	74.5	61.6	99.6	108.0	95.8	41.1
82.5°	29.7	31.2	38.0	49.4	52.5	35.0	22.8	29.7	31.2	31.2	16.0
85°	5.3	7.6	28.1	41.1	31.2	10.6	12.9	10.6	9.9	10.6	3.8
87.5°	0.0	0.0	17.5	19.8	16.7	4.6	5.3	3.8	2.3	3.0	1.5
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°	327.7	327.7	327.7	327.7	327.7	327.7	327.7	327.7	327.7	327.7	327.7
2.5°	330.0	314.0	286.7	266.9	250.2	237.2	231.9	223.5	217.5	220.5	216.7
5°	339.1	311.0	266.9	238.8	219.0	202.3	188.6	177.9	169.6	168.0	166.5
7.5°	353.6	313.3	255.5	220.5	190.9	165.0	143.7	127.7	115.6	115.6	111.0
10°	373.3	319.4	248.6	202.3	158.2	123.2	101.9	86.7	80.6	79.8	78.3
12.5°	400.7	330.8	243.3	178.7	123.2	89.7	76.8	71.5	69.2	68.4	67.7
15°	438.0	347.5	237.2	149.8	93.5	73.8	68.4	63.9	61.6	60.8	60.1
17.5°	473.7	362.7	224.3	120.1	76.0	66.9	60.8	57.0	54.0	53.2	53.2
20°	507.2	375.6	202.3	93.5	68.4	60.1	54.0	49.4	46.4	45.6	45.6
22.5°	542.1	386.3	174.9	76.0	62.4	53.2	47.1	42.6	39.5	38.8	38.0
25°	579.4	393.9	143.7	67.7	56.3	47.1	40.3	36.5	34.2	33.5	32.7
27.5°	619.7	396.9	114.1	61.6	49.4	41.1	35.0	31.2	29.7	28.9	28.9
30°	656.2	393.9	88.2	54.7	43.3	35.7	30.4	27.4	25.9	25.1	25.1
32.5°	694.2	386.3	70.7	48.7	38.0	30.4	25.9	23.6	22.8	22.1	22.1
35°	734.5	376.4	60.8	43.3	32.7	26.6	22.8	21.3	20.5	19.8	19.8
37.5°	781.7	364.2	55.5	38.8	28.9	23.6	19.8	19.0	18.2	18.2	18.2
40°	834.9	349.0	51.7	35.0	25.9	20.5	17.5	16.7	16.0	16.0	16.0
42.5°	891.2	331.5	47.9	31.2	22.8	17.5	15.2	15.2	14.4	14.4	13.7
45°	954.3	314.0	44.1	27.4	19.8	15.2	12.9	12.2	12.2	11.4	11.4
47.5°	1028.8	298.1	40.3	24.3	17.5	12.9	11.4	10.6	9.9	9.1	9.1
50°	1133.7	296.5	35.7	21.3	16.0	10.6	9.1	8.4	7.6	6.8	6.8
52.5°	1237.9	282.9	30.4	17.5	12.9	9.1	6.8	6.1	5.3	5.3	4.6
55°	1261.5	260.0	26.6	15.2	9.9	6.8	5.3	3.8	3.8	3.0	3.0
57.5°	1313.2	249.4	22.8	12.2	7.6	5.3	3.0	2.3	2.3	2.3	2.3
60°	1415.1	246.4	19.8	10.6	5.3	3.8	2.3	1.5	1.5	0.8	0.8
62.5°	1555.7	243.3	16.7	9.1	3.8	2.3	1.5	0.8	0.0	0.0	0.0
65°	1633.3	222.8	13.7	6.8	3.0	2.3	0.8	0.0	0.0	0.0	0.0
67.5°	1612.8	184.0	12.2	4.6	2.3	1.5	0.8	0.0	0.0	0.0	0.0
69°	1526.8	155.1	9.9	3.8	2.3	1.5	0.8	0.0	0.0	0.0	0.0
70°	1423.4	133.8	9.1	3.0	1.5	0.8	0.8	0.0	0.0	0.0	0.0
72.5°	1010.5	70.0	6.1	2.3	1.5	0.8	0.0	0.0	0.0	0.0	0.0
75°	472.2	31.2	3.8	1.5	0.8	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	104.2	14.4	2.3	1.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	19.8	5.3	1.5	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.8	2.3	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	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)