

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: P265933

Luminaire Tested: **ARCH-AF24-40-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265933
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-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 3456.8 lumens
Efficiency: N/A
Efficacy: 86.4 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

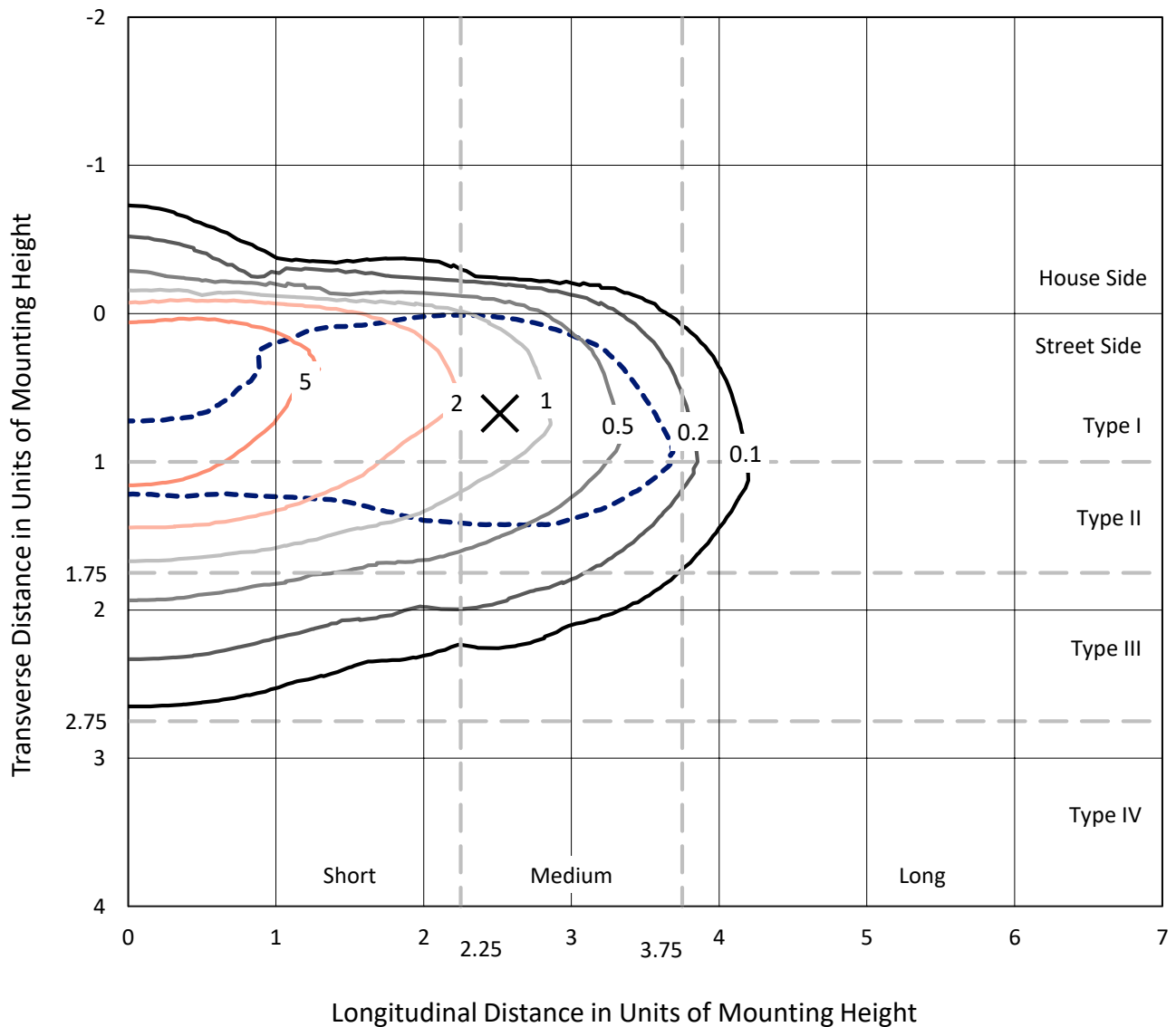


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

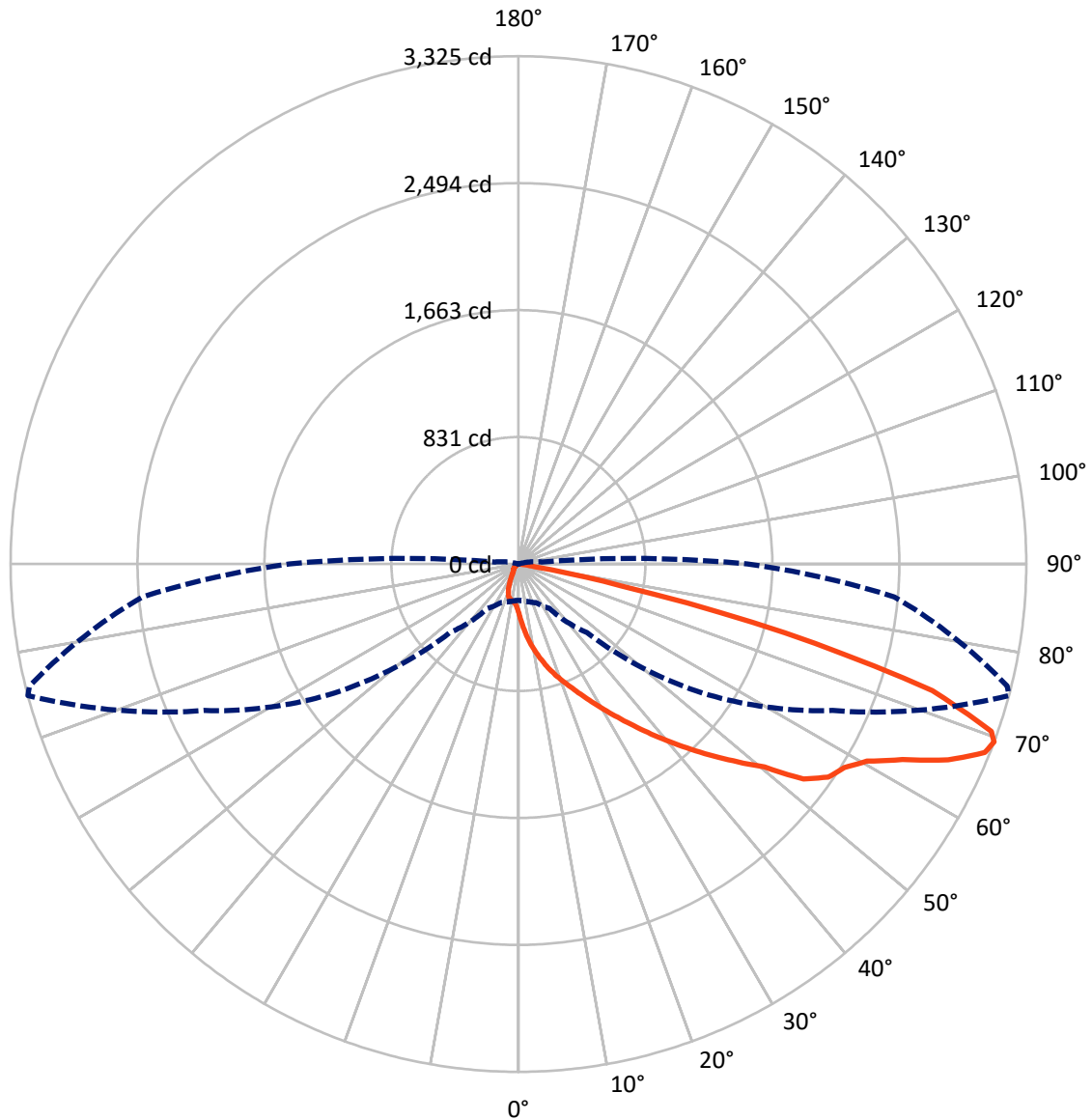


Based on 10 foot mounting height. Maximum calculated value = 8.8 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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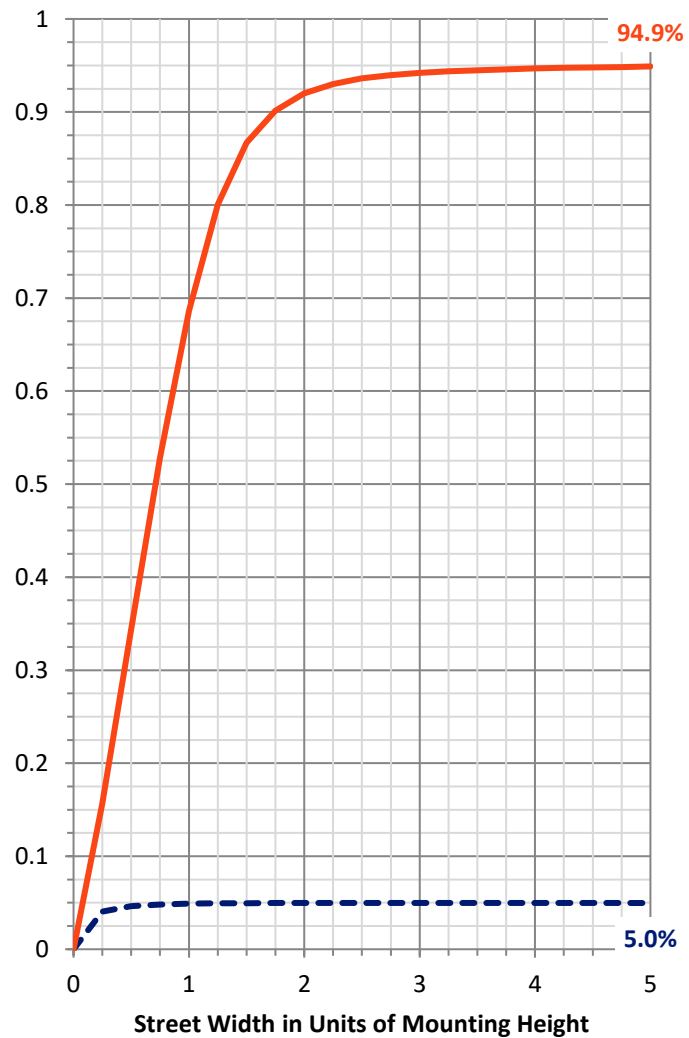
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	172.5	0.0	172.5
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	3284.3	0.0	3284.3
	% Fixture	95.0	0.0	95.0
Total	Lumens	3456.8	0.0	3456.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	1.1
10°-20°	134.1	3.9
20°-30°	256.0	7.4
30°-40°	459.2	13.3
40°-50°	703.5	20.4
50°-60°	817.6	23.7
60°-70°	724.0	20.9
70°-80°	312.3	9.0
80°-90°	12.5	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°	3456.8	100.0
0°-180°	3456.8	100.0

Coefficient of Utilization



--- HS — SS

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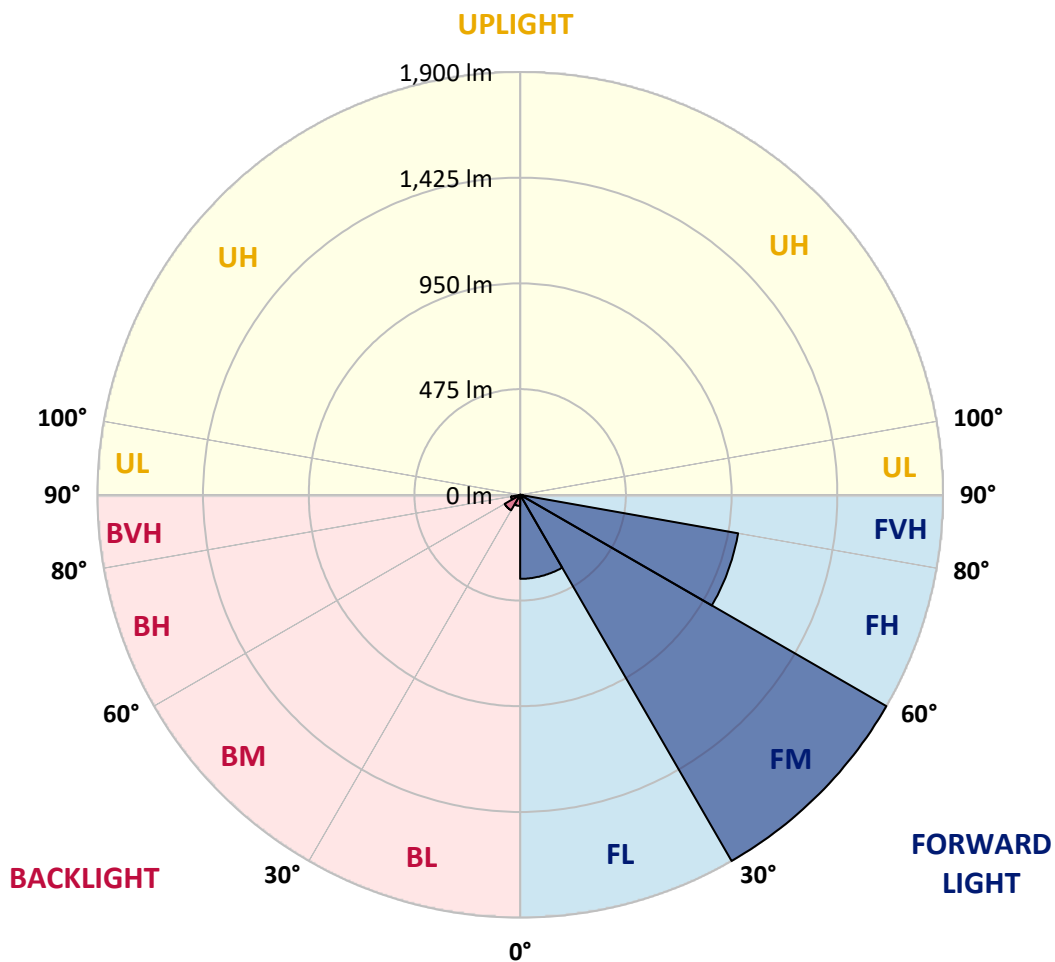
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	377.5	10.9			
FM	(30°-60°)	1899.9	55.0			
FH	(60°-80°)	994.6	28.8			G1/1800
FVH	(80°-90°)	12.3	0.4			G1/100
BL	(0°-30°)	50.1	1.4	B0/110		
BM	(30°-60°)	80.4	2.3	B0/220		
BH	(60°-80°)	41.8	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°	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7
2.5°	529.9	524.6	519.4	513.4	499.9	476.9	447.7	416.5	377.6	370.9	339.6
5°	643.2	641.1	635.8	627.6	612.7	587.3	554.6	508.3	443.4	432.2	365.7
7.5°	723.1	721.7	717.1	707.4	694.0	668.7	634.4	584.3	509.0	496.3	398.5
10°	794.8	794.0	790.2	781.3	768.0	740.4	703.7	651.5	571.6	557.5	436.5
12.5°	859.7	860.4	859.0	854.5	844.8	818.6	776.9	720.3	632.0	616.4	482.1
15°	897.8	900.0	906.0	915.0	918.0	897.0	853.7	791.0	694.0	680.6	534.3
17.5°	885.1	887.3	906.0	936.7	965.7	968.7	929.8	858.2	755.2	741.8	585.9
20°	854.5	857.5	876.8	918.6	975.4	1014.9	999.3	931.4	813.4	797.1	635.1
22.5°	888.9	888.9	894.8	920.1	971.6	1033.6	1054.5	1004.6	873.2	853.0	684.4
25°	1006.7	1004.6	991.8	981.4	997.7	1053.1	1096.3	1079.1	943.3	920.1	736.6
27.5°	1155.9	1166.4	1142.6	1104.6	1067.1	1091.1	1133.7	1153.1	1021.0	997.1	790.2
30°	1323.2	1327.7	1299.3	1248.6	1182.9	1159.7	1177.7	1216.5	1105.3	1079.1	846.4
32.5°	1473.8	1470.2	1446.4	1393.4	1312.0	1261.9	1234.5	1267.1	1197.0	1167.2	903.8
35°	1607.4	1610.5	1581.3	1520.2	1440.3	1387.3	1321.6	1324.7	1300.0	1265.7	970.2
37.5°	1727.7	1722.4	1694.8	1633.7	1561.3	1503.9	1434.4	1384.4	1412.8	1376.9	1044.8
40°	1825.4	1820.1	1791.1	1731.5	1663.5	1616.5	1562.1	1464.2	1531.4	1490.4	1124.7
42.5°	1903.1	1897.1	1872.4	1814.9	1749.3	1707.5	1681.4	1562.7	1658.2	1617.2	1214.1
45°	1941.1	1935.8	1920.9	1877.6	1820.1	1783.7	1796.3	1676.1	1794.1	1759.8	1312.8
47.5°	1896.3	1894.0	1911.2	1903.8	1871.0	1851.5	1895.6	1800.1	1936.7	1903.1	1426.1
50°	1760.5	1764.2	1814.2	1876.2	1891.8	1914.9	1976.9	1930.6	2089.5	2053.7	1556.8
52.5°	1425.4	1450.9	1601.6	1750.7	1866.5	1953.9	2072.5	2117.2	2338.8	2303.9	1760.5
55°	1064.2	1074.6	1238.9	1494.2	1764.2	1950.8	2143.4	2227.0	2462.1	2426.2	1814.2
57.5°	844.0	847.8	929.1	1189.5	1553.8	1883.7	2180.6	2266.6	2515.8	2485.9	1894.0
60°	662.7	667.3	726.1	905.2	1257.4	1702.3	2126.9	2300.7	2621.0	2597.1	2033.7
62.5°	515.6	520.2	556.1	661.2	943.3	1423.2	2018.8	2356.1	2820.9	2809.8	2262.0
65°	399.2	400.7	425.3	474.7	666.5	1120.9	1886.6	2407.5	3091.2	3081.5	2447.2
67.5°	294.7	297.0	314.1	344.8	450.1	805.2	1670.2	2368.0	3294.9	3266.5	2514.3
69°	238.1	240.2	255.2	279.8	355.2	634.4	1472.4	2270.2	3325.4	3298.5	2471.7
70°	203.7	205.3	220.2	241.0	303.0	538.9	1315.7	2185.8	3285.2	3259.1	2374.7
72.5°	130.7	138.1	153.0	166.5	200.7	356.7	888.1	1812.7	2834.4	2789.6	1859.8
75°	72.5	74.6	101.5	117.9	133.6	232.1	494.1	1130.6	1803.1	1771.6	994.9
77.5°	59.6	61.3	71.7	89.6	89.6	129.8	186.6	445.5	685.9	618.7	269.4
80°	41.9	43.3	54.4	59.0	64.1	73.1	60.5	97.7	106.0	94.1	40.3
82.5°	29.1	30.6	37.3	48.5	51.6	34.3	22.4	29.1	30.6	30.6	15.7
85°	5.2	7.5	27.6	40.3	30.6	10.4	12.7	10.4	9.7	10.4	3.8
87.5°	0.0	0.0	17.2	19.5	16.3	4.5	5.2	3.8	2.2	3.0	1.4
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°	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7
2.5°	323.8	308.2	281.3	261.9	245.5	232.8	227.6	219.4	213.4	216.4	212.7
5°	332.8	305.2	261.9	234.4	215.0	198.5	185.1	174.6	166.5	164.8	163.4
7.5°	347.0	307.5	250.7	216.4	187.3	162.0	141.0	125.4	113.5	113.5	109.0
10°	366.4	313.5	244.0	198.5	155.2	120.9	100.0	85.1	79.1	78.3	76.8
12.5°	393.3	324.6	238.8	175.3	120.9	88.0	75.4	70.2	67.9	67.2	66.5
15°	429.8	341.0	232.8	147.1	91.7	72.5	67.2	62.7	60.5	59.6	59.0
17.5°	465.0	356.0	220.2	117.9	74.6	65.7	59.6	56.0	53.0	52.2	52.2
20°	497.8	368.7	198.5	91.7	67.2	59.0	53.0	48.5	45.5	44.7	44.7
22.5°	532.1	379.2	171.7	74.6	61.3	52.2	46.3	41.9	38.7	38.1	37.3
25°	568.6	386.6	141.0	66.5	55.2	46.3	39.5	35.8	33.5	32.9	32.1
27.5°	608.2	389.5	112.0	60.5	48.5	40.3	34.3	30.6	29.1	28.3	28.3
30°	644.1	386.6	86.5	53.7	42.5	35.0	29.9	26.9	25.4	24.7	24.7
32.5°	681.4	379.2	69.3	47.8	37.3	29.9	25.4	23.1	22.4	21.6	21.6
35°	720.9	369.5	59.6	42.5	32.1	26.1	22.4	20.9	20.1	19.5	19.5
37.5°	767.2	357.4	54.4	38.1	28.3	23.1	19.5	18.7	17.8	17.8	17.8
40°	819.4	342.6	50.8	34.3	25.4	20.1	17.2	16.3	15.7	15.7	15.7
42.5°	874.7	325.4	47.0	30.6	22.4	17.2	14.9	14.9	14.2	14.2	13.5
45°	936.7	308.2	43.3	26.9	19.5	14.9	12.7	11.9	11.9	11.1	11.1
47.5°	1009.8	292.6	39.5	23.9	17.2	12.7	11.1	10.4	9.7	9.0	9.0
50°	1112.7	291.1	35.0	20.9	15.7	10.4	9.0	8.3	7.5	6.6	6.6
52.5°	1215.0	277.7	29.9	17.2	12.7	9.0	6.6	6.0	5.2	5.2	4.5
55°	1238.1	255.2	26.1	14.9	9.7	6.6	5.2	3.8	3.8	3.0	3.0
57.5°	1288.9	244.8	22.4	11.9	7.5	5.2	3.0	2.2	2.2	2.2	2.2
60°	1388.9	241.9	19.5	10.4	5.2	3.8	2.2	1.4	1.4	0.8	0.8
62.5°	1526.8	238.8	16.3	9.0	3.8	2.2	1.4	0.8	0.0	0.0	0.0
65°	1603.0	218.6	13.5	6.6	3.0	2.2	0.8	0.0	0.0	0.0	0.0
67.5°	1583.0	180.6	11.9	4.5	2.2	1.4	0.8	0.0	0.0	0.0	0.0
69°	1498.6	152.3	9.7	3.8	2.2	1.4	0.8	0.0	0.0	0.0	0.0
70°	1397.0	131.3	9.0	3.0	1.4	0.8	0.8	0.0	0.0	0.0	0.0
72.5°	991.8	68.7	6.0	2.2	1.4	0.8	0.0	0.0	0.0	0.0	0.0
75°	463.4	30.6	3.8	1.4	0.8	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	102.2	14.2	2.2	1.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	19.5	5.2	1.4	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.6	2.2	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.2	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)