

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: P397707

Luminaire Tested: **ARCH-S-PA1-30-750-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397707  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-30-750-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 375mA 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: 3665 lumens  
Efficiency: N/A  
Efficacy: 118.2 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

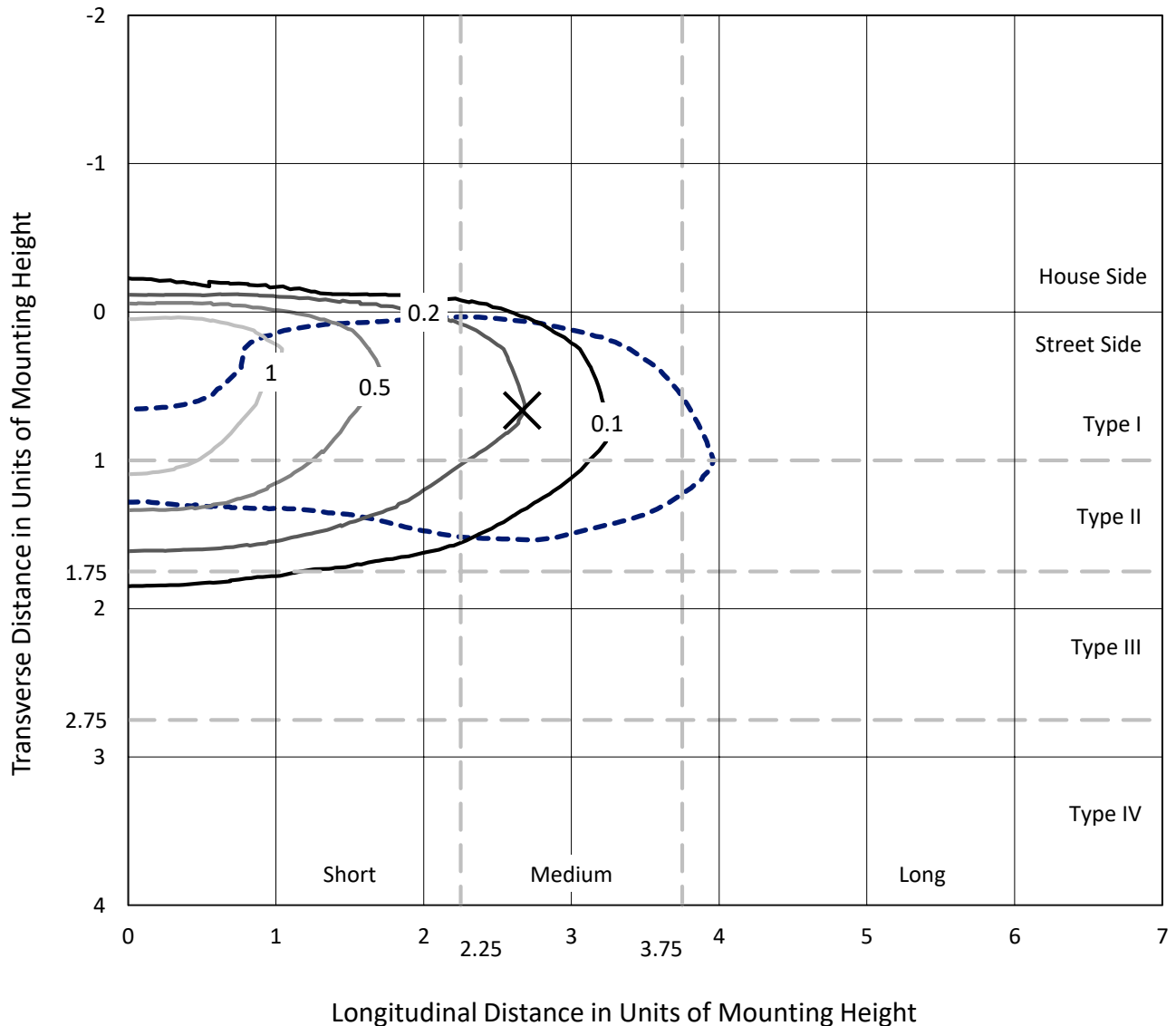
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

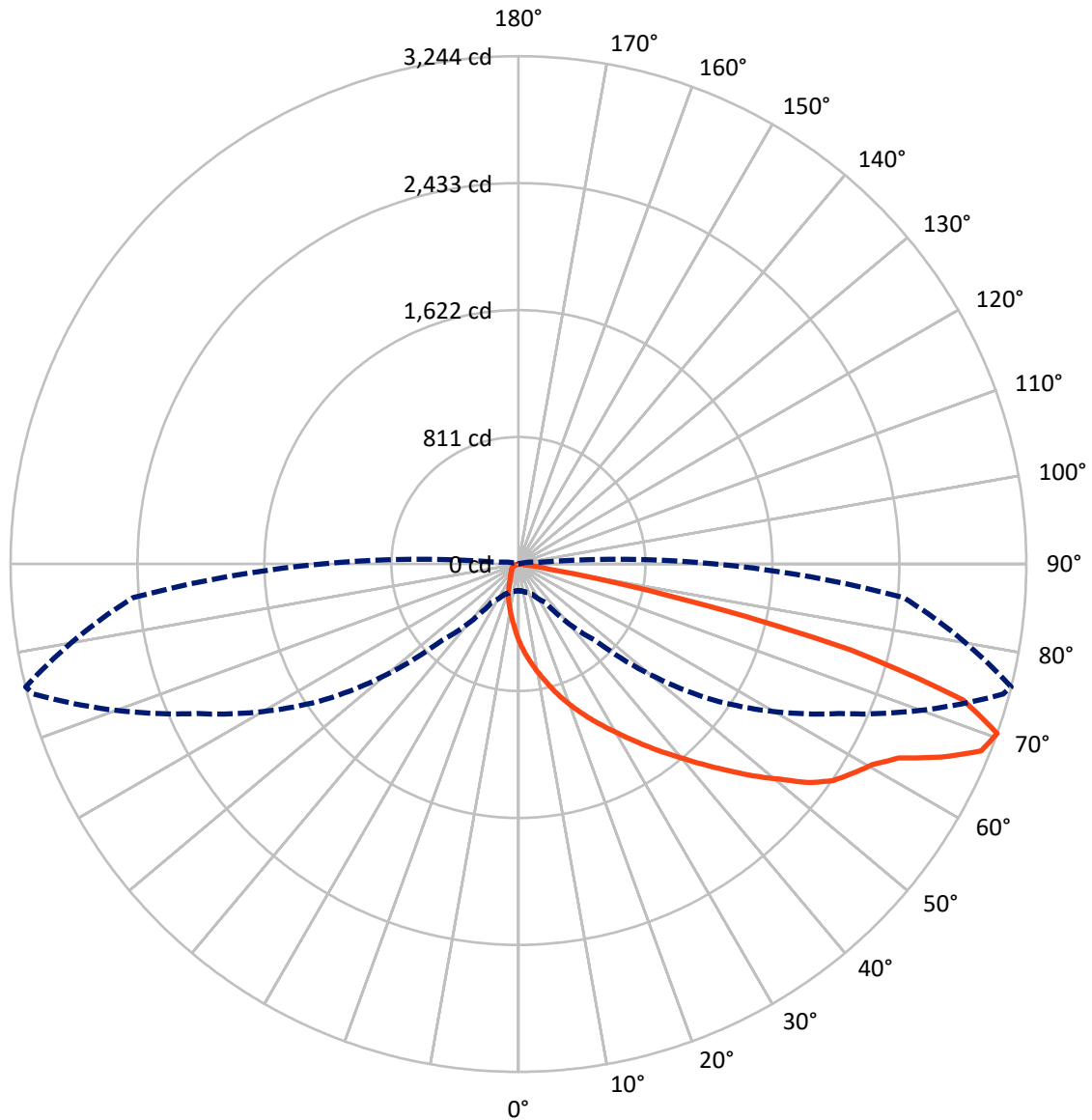
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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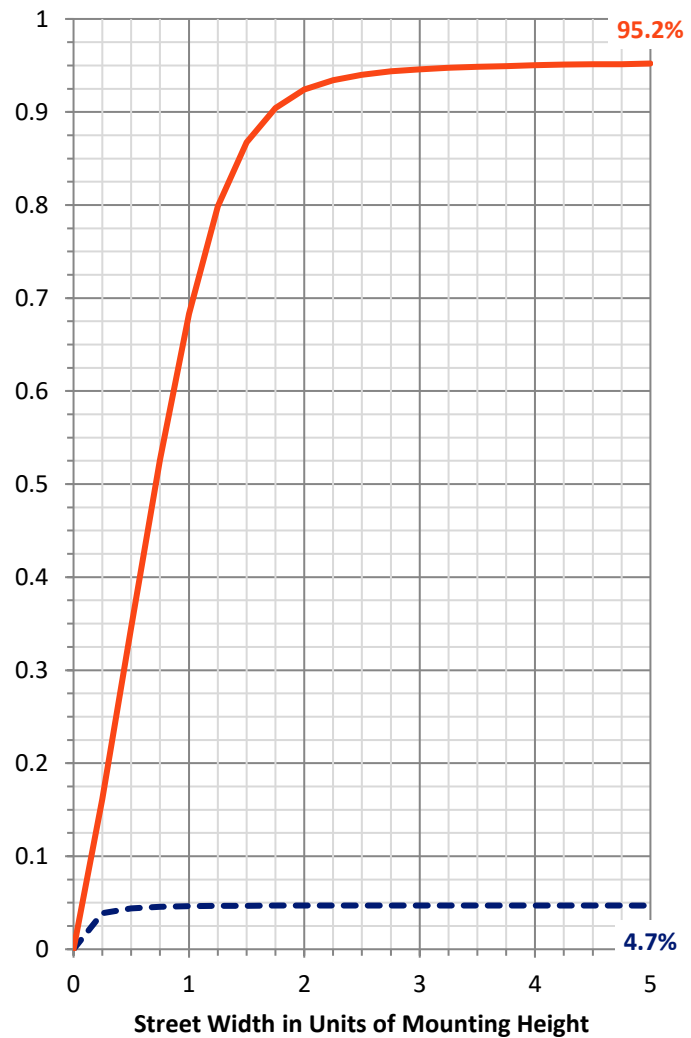
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	172.8	0.0	172.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	3492.2	0.0	3492.2
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	3665.0	0.0	3665.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.2	1.3
10°-20°	149.2	4.1
20°-30°	277.8	7.6
30°-40°	491.4	13.4
40°-50°	751.4	20.5
50°-60°	851.9	23.2
60°-70°	730.3	19.9
70°-80°	353.7	9.7
80°-90°	13.1	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°	3665.0	100.0
0°-180°	3665.0	100.0

**Coefficient of Utilization**



--- HS    — SS

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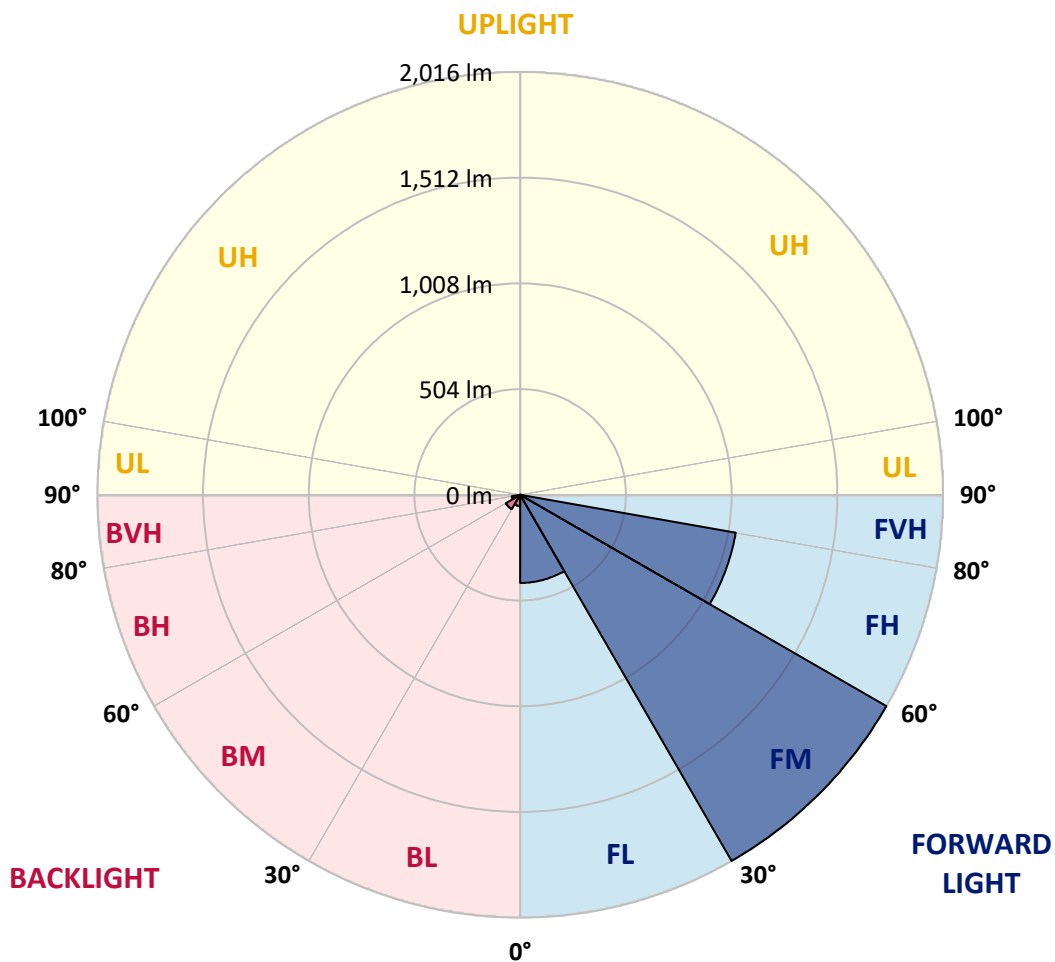
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	420.2	11.5			
FM	(30°-60°)	2015.8	55.0			
FH	(60°-80°)	1043.3	28.5			G1/1800
FVH	(80°-90°)	12.9	0.4			G1/100
BL	(0°-30°)	53.0	1.4	B0/110		
BM	(30°-60°)	78.9	2.2	B0/220		
BH	(60°-80°)	40.7	1.1	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°	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6
2.5°	670.6	666.9	663.3	649.2	636.4	624.8	602.9	574.2	548.6	543.1	513.2
5°	787.7	783.5	778.0	763.9	747.5	727.9	695.6	651.7	606.5	596.8	541.2
7.5°	867.1	863.4	855.5	848.8	832.3	813.4	777.4	726.1	663.9	651.7	573.6
10°	921.4	918.9	917.7	912.2	900.0	884.8	848.8	795.1	721.8	707.8	607.7
12.5°	940.9	940.9	947.0	956.2	958.0	953.1	920.1	866.5	782.9	768.2	648.0
15°	914.7	917.7	931.1	960.4	990.9	1011.1	990.3	940.3	850.0	834.1	695.6
17.5°	907.3	910.4	919.5	945.2	986.0	1039.7	1050.1	1011.7	913.4	900.0	744.4
20°	928.1	931.1	939.1	961.0	992.2	1046.5	1089.8	1080.6	980.6	966.5	793.8
22.5°	977.5	979.3	979.3	996.4	1023.9	1064.2	1114.8	1145.9	1049.5	1034.3	842.7
25°	1083.7	1080.0	1065.4	1056.8	1074.5	1107.5	1146.5	1203.3	1126.4	1105.6	895.1
27.5°	1222.8	1235.0	1199.6	1158.7	1145.3	1164.2	1191.1	1253.9	1200.8	1178.9	942.7
30°	1411.3	1406.5	1360.1	1301.5	1243.5	1236.8	1246.0	1297.2	1275.3	1254.5	995.8
32.5°	1566.3	1575.5	1526.7	1455.3	1368.6	1327.7	1318.0	1349.1	1354.6	1341.2	1058.7
35°	1725.6	1735.3	1687.8	1608.4	1505.3	1437.0	1408.9	1413.2	1452.8	1435.8	1124.6
37.5°	1868.4	1876.9	1829.9	1748.8	1645.7	1562.1	1521.8	1488.8	1548.0	1532.8	1194.1
40°	1977.0	1978.2	1946.5	1873.9	1776.2	1689.6	1643.8	1579.1	1648.7	1638.3	1266.7
42.5°	2053.9	2056.3	2033.1	1970.9	1880.6	1800.0	1762.8	1685.9	1764.6	1755.5	1350.9
45°	2089.9	2094.1	2091.7	2034.3	1959.3	1889.7	1877.5	1799.4	1891.6	1883.0	1448.0
47.5°	2055.7	2055.7	2086.8	2078.9	2009.9	1963.6	1977.6	1917.8	2029.5	2021.5	1546.8
50°	1913.5	1915.4	1978.8	2069.7	2029.5	2019.1	2063.0	2033.7	2154.5	2159.4	1665.2
52.5°	1540.1	1537.0	1751.2	1925.7	2016.0	2044.1	2141.7	2152.1	2304.6	2319.3	1782.9
55°	1150.8	1149.0	1354.0	1670.7	1922.1	2031.3	2185.7	2257.7	2432.8	2441.9	1870.8
57.5°	911.0	906.1	1019.0	1346.7	1709.7	1973.9	2187.5	2277.8	2504.2	2520.0	1956.2
60°	700.5	696.2	780.4	1001.9	1408.9	1821.4	2135.0	2279.0	2573.1	2601.2	2070.9
62.5°	501.0	505.8	570.5	718.8	1083.7	1606.0	2066.7	2296.1	2695.8	2727.5	2233.9
65°	338.0	335.6	389.3	489.4	770.7	1316.2	1961.7	2332.1	2916.7	2972.2	2429.1
67.5°	234.9	236.7	261.2	318.5	489.4	1010.5	1787.2	2352.2	3144.9	3188.2	2565.8
70°	169.6	172.1	185.5	214.2	299.0	685.2	1510.8	2260.1	3206.5	3244.3	2470.6
72.5°	111.7	116.5	136.7	151.9	191.0	429.0	1113.0	1947.1	2941.1	2969.1	2072.8
75°	60.4	61.6	87.9	113.5	136.1	267.3	663.9	1313.1	2200.3	2191.2	1366.8
77.5°	47.0	48.8	54.3	81.2	91.5	147.1	262.4	593.1	1042.2	1014.1	466.2
80°	28.7	29.9	37.8	48.2	64.1	85.4	76.9	161.1	211.7	198.3	68.3
82.5°	17.1	18.3	22.6	40.3	50.6	40.3	26.8	39.1	39.7	39.1	17.1
85°	3.1	3.1	15.9	28.1	26.8	11.6	15.9	12.8	11.6	12.2	3.7
87.5°	0.0	0.0	6.1	8.5	12.2	4.3	6.1	3.1	3.1	3.1	1.8
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°	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6
2.5°	494.9	474.1	431.4	394.2	357.0	329.5	308.8	287.4	280.1	270.9	266.0
5°	503.4	462.5	377.7	310.0	252.6	208.7	180.6	163.5	152.5	144.6	142.8
7.5°	516.2	453.4	334.4	242.9	180.0	136.1	112.9	101.3	95.2	91.5	90.3
10°	531.5	445.4	291.7	189.2	126.9	95.8	83.0	78.1	75.7	74.4	73.8
12.5°	552.8	442.4	255.7	145.8	95.8	78.7	72.0	69.0	67.1	65.3	64.7
15°	580.9	443.6	222.7	112.9	79.3	70.2	64.7	61.6	59.2	57.4	57.4
17.5°	610.2	445.4	190.4	91.5	72.0	64.1	58.0	53.7	51.9	50.0	49.4
20°	637.6	444.8	159.3	78.1	65.3	57.4	51.3	47.0	43.9	42.1	42.1
22.5°	663.9	441.2	130.0	70.2	59.8	50.6	43.9	39.7	37.2	35.4	35.4
25°	691.9	433.8	106.2	64.1	53.1	44.5	37.8	33.6	31.7	29.9	29.9
27.5°	713.9	421.6	86.6	58.6	47.0	38.4	32.3	28.7	26.8	25.6	25.6
30°	737.7	403.9	72.0	52.5	40.9	32.9	27.5	24.4	22.6	22.0	22.0
32.5°	763.9	384.4	61.6	46.4	34.8	28.1	23.2	21.4	19.5	18.9	18.9
35°	794.5	367.3	55.5	40.3	30.5	23.8	20.1	18.3	17.1	17.1	17.1
37.5°	829.2	349.6	50.0	35.4	26.2	20.1	17.1	16.5	15.9	15.3	15.3
40°	867.1	330.7	45.2	31.1	22.6	17.1	14.6	14.6	14.0	14.0	14.0
42.5°	909.8	314.2	40.9	27.5	19.5	14.6	12.8	12.8	12.2	12.2	12.2
45°	956.2	299.0	37.2	24.4	17.1	12.8	11.6	11.0	10.4	10.4	10.4
47.5°	1011.1	290.4	34.2	21.4	14.6	11.0	9.8	9.2	8.5	7.9	7.9
50°	1081.2	294.1	31.1	17.7	12.8	9.2	7.9	7.3	6.7	6.1	6.1
52.5°	1136.8	292.3	26.8	15.3	10.4	7.3	6.1	5.5	4.9	4.3	4.3
55°	1177.0	285.0	23.2	12.8	7.9	6.1	4.9	3.7	3.1	3.1	3.1
57.5°	1216.7	277.6	19.5	10.4	6.1	4.3	3.1	2.4	2.4	2.4	2.4
60°	1278.3	267.3	17.1	8.5	4.9	3.1	1.8	1.8	1.2	1.2	1.2
62.5°	1353.4	254.4	14.0	7.3	3.7	2.4	1.2	1.2	0.0	0.0	0.0
65°	1435.8	231.9	11.6	5.5	3.1	1.8	1.2	0.0	0.0	0.0	0.0
67.5°	1416.8	186.1	9.8	3.7	2.4	1.2	0.6	0.0	0.0	0.0	0.0
70°	1253.3	125.7	7.9	3.1	1.8	1.2	0.6	0.0	0.0	0.0	0.0
72.5°	981.8	74.4	5.5	2.4	1.2	0.6	0.0	0.0	0.0	0.0	0.0
75°	628.5	37.2	3.7	1.8	1.2	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	210.5	18.3	2.4	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	29.9	6.1	1.2	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.7	2.4	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.4	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	0.6	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)