

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: P397797

Luminaire Tested: **ARCH-S-PA1-40-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397797
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-PA1-40-827-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 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: 3476 lumens
Efficiency: N/A
Efficacy: 86.9 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

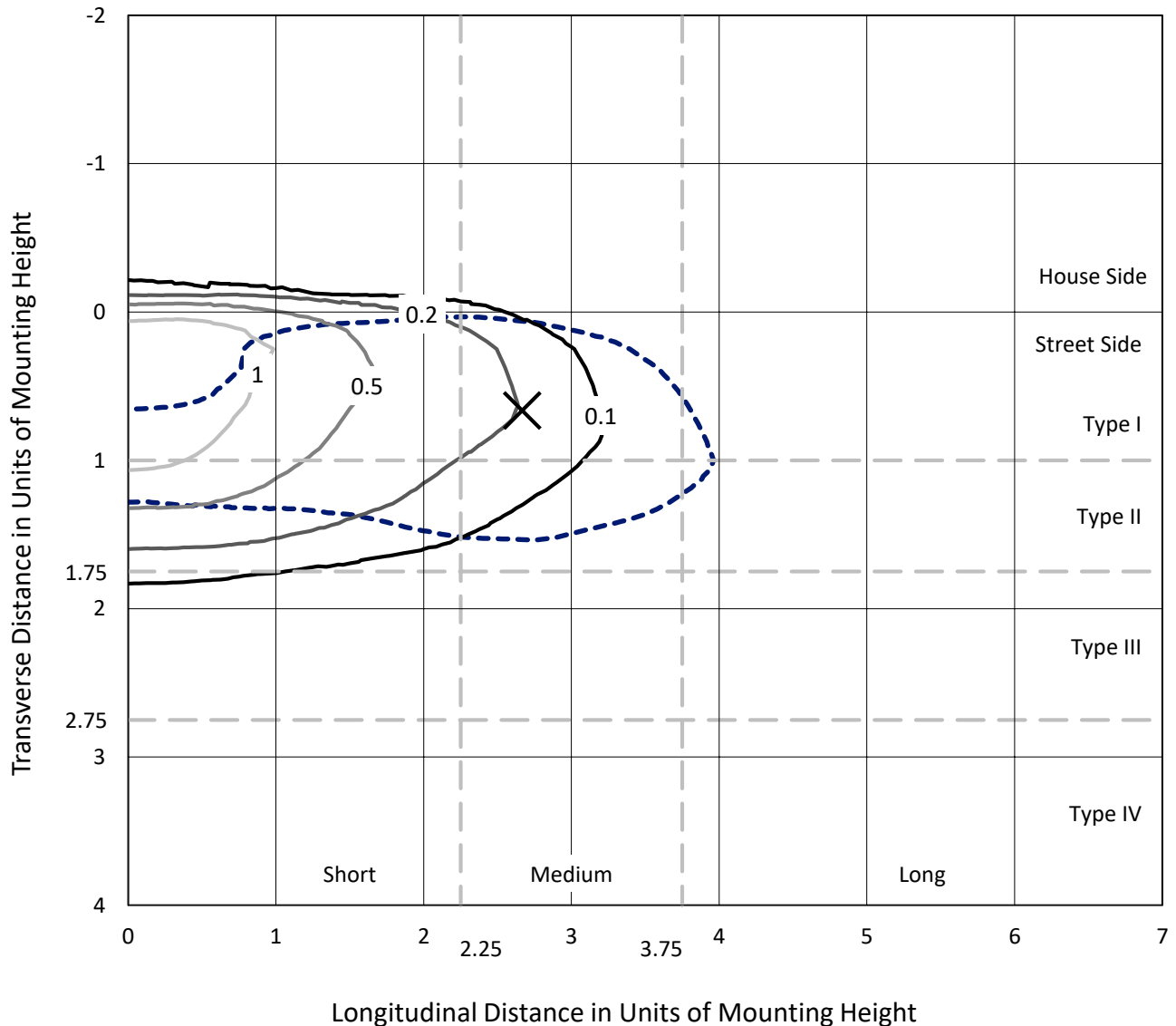
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

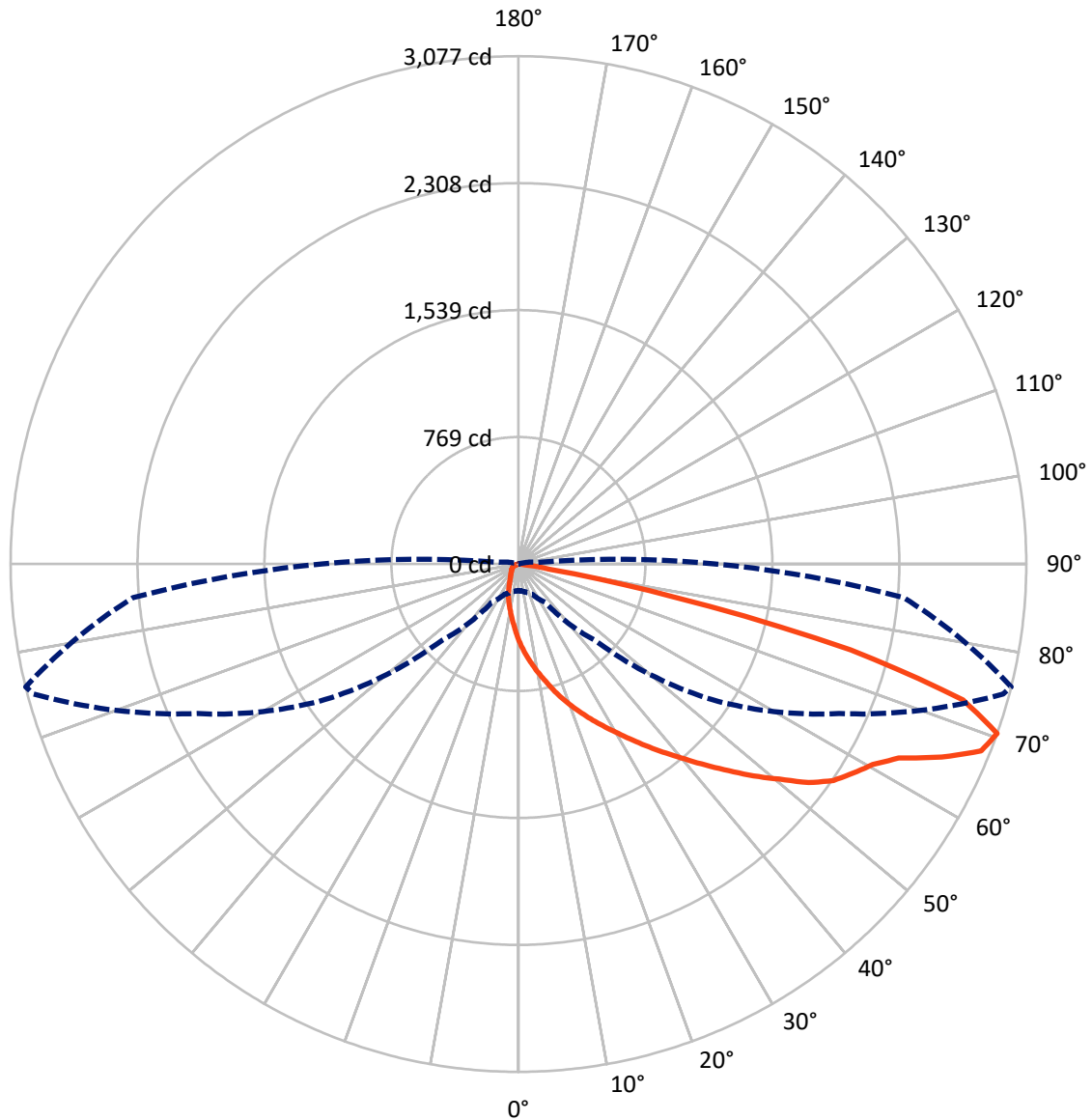
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 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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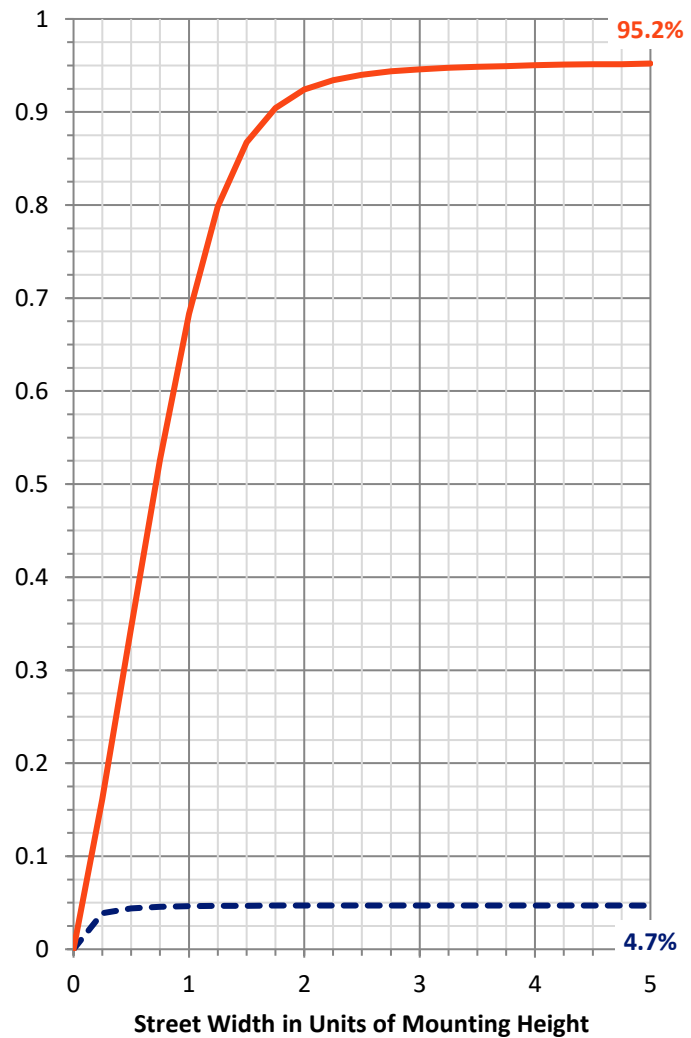
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	164.0	0.0	164.0
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	3312.1	0.0	3312.1
	% Fixture	95.3	0.0	95.3
Total	Lumens	3476.0	0.0	3476.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.8	1.3
10°-20°	141.5	4.1
20°-30°	263.5	7.6
30°-40°	466.0	13.4
40°-50°	712.7	20.5
50°-60°	808.0	23.2
60°-70°	692.6	19.9
70°-80°	335.5	9.7
80°-90°	12.4	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°	3476.0	100.0
0°-180°	3476.0	100.0

Coefficient of Utilization



--- HS — SS

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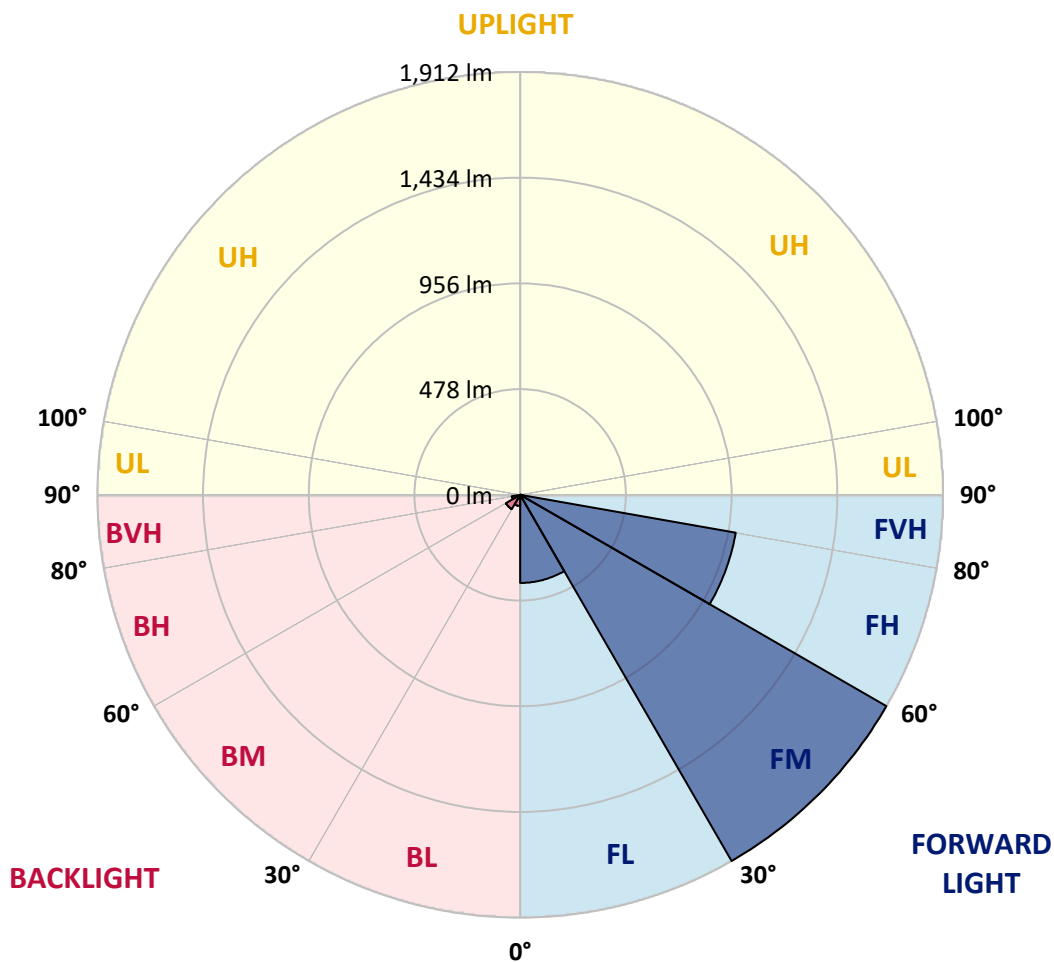
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	398.5	11.5			
FM (30°-60°)	1911.8	55.0			
FH (60°-80°)	989.5	28.5			G1/1800
FVH (80°-90°)	12.2	0.4			G1/100
BL (0°-30°)	50.3	1.4	B0/110		
BM (30°-60°)	74.8	2.2	B0/220		
BH (60°-80°)	38.6	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°	465.3	465.3	465.3	465.3	465.3	465.3	465.3	465.3	465.3	465.3	465.3
2.5°	636.0	632.5	629.1	615.8	603.6	592.6	571.8	544.6	520.3	515.1	486.7
5°	747.1	743.1	737.9	724.5	708.9	690.4	659.7	618.1	575.2	566.0	513.3
7.5°	822.4	818.9	811.4	805.0	789.4	771.4	737.3	688.7	629.6	618.1	544.0
10°	873.9	871.5	870.4	865.2	853.6	839.1	805.0	754.1	684.6	671.3	576.4
12.5°	892.4	892.4	898.2	906.8	908.6	903.9	872.7	821.8	742.5	728.6	614.6
15°	867.5	870.4	883.1	910.9	939.8	958.9	939.3	891.8	806.1	791.1	659.7
17.5°	860.5	863.4	872.1	896.4	935.2	986.1	996.0	959.5	866.3	853.6	706.0
20°	880.2	883.1	890.6	911.5	941.0	992.5	1033.6	1024.9	930.0	916.7	752.9
22.5°	927.1	928.8	928.8	945.0	971.1	1009.3	1057.3	1086.8	995.4	980.9	799.2
25°	1027.8	1024.3	1010.4	1002.3	1019.1	1050.4	1087.4	1141.2	1068.3	1048.6	849.0
27.5°	1159.7	1171.3	1137.7	1099.0	1086.2	1104.2	1129.6	1189.3	1138.9	1118.1	894.1
30°	1338.6	1333.9	1290.0	1234.4	1179.4	1173.1	1181.7	1230.3	1209.5	1189.8	944.5
32.5°	1485.6	1494.2	1447.9	1380.2	1298.1	1259.3	1250.0	1279.5	1284.7	1272.0	1004.1
35°	1636.6	1645.9	1600.7	1525.5	1427.7	1362.9	1336.2	1340.3	1377.9	1361.7	1066.6
37.5°	1772.0	1780.1	1735.6	1658.6	1560.8	1481.5	1443.3	1412.1	1468.2	1453.7	1132.5
40°	1875.0	1876.2	1846.1	1777.2	1684.6	1602.5	1559.1	1497.7	1563.7	1553.8	1201.4
42.5°	1947.9	1950.3	1928.3	1869.2	1783.6	1707.2	1671.9	1599.0	1673.6	1665.0	1281.3
45°	1982.1	1986.1	1983.8	1929.4	1858.2	1792.3	1780.7	1706.6	1794.0	1785.9	1373.3
47.5°	1949.7	1949.7	1979.2	1971.7	1906.3	1862.3	1875.6	1818.9	1924.8	1917.3	1467.0
50°	1814.8	1816.6	1876.8	1963.0	1924.8	1915.0	1956.6	1928.8	2043.4	2048.1	1579.3
52.5°	1460.7	1457.8	1660.9	1826.4	1912.1	1938.7	2031.3	2041.1	2185.8	2199.7	1691.0
55°	1091.5	1089.7	1284.2	1584.5	1822.9	1926.5	2072.9	2141.2	2307.3	2316.0	1774.3
57.5°	864.0	859.4	966.5	1277.2	1621.6	1872.1	2074.7	2160.3	2375.0	2390.1	1855.4
60°	664.4	660.3	740.2	950.2	1336.2	1727.5	2024.9	2161.5	2440.4	2467.1	1964.2
62.5°	475.1	479.8	541.1	681.7	1027.8	1523.2	1960.1	2177.7	2556.8	2586.8	2118.7
65°	320.6	318.3	369.2	464.1	730.9	1248.3	1860.6	2211.8	2766.2	2818.9	2303.9
67.5°	222.8	224.5	247.7	302.1	464.1	958.3	1695.0	2230.9	2982.7	3023.8	2433.5
70°	160.9	163.2	175.9	203.1	283.6	649.9	1432.9	2143.6	3041.1	3077.0	2343.2
72.5°	105.9	110.5	129.6	144.1	181.1	406.8	1055.6	1846.7	2789.4	2816.0	1965.9
75°	57.3	58.4	83.3	107.6	129.1	253.5	629.6	1245.4	2086.8	2078.2	1296.3
77.5°	44.6	46.3	51.5	77.0	86.8	139.5	248.8	562.5	988.4	961.8	442.1
80°	27.2	28.4	35.9	45.7	60.8	81.0	72.9	152.8	200.8	188.1	64.8
82.5°	16.2	17.4	21.4	38.2	48.0	38.2	25.5	37.0	37.6	37.0	16.2
85°	2.9	2.9	15.0	26.6	25.5	11.0	15.0	12.2	11.0	11.6	3.5
87.5°	0.0	0.0	5.8	8.1	11.6	4.1	5.8	2.9	2.9	2.9	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°	465.3	465.3	465.3	465.3	465.3	465.3	465.3	465.3	465.3	465.3	465.3
2.5°	469.3	449.7	409.1	373.8	338.5	312.5	292.8	272.6	265.6	256.9	252.3
5°	477.4	438.7	358.2	294.0	239.6	197.9	171.3	155.1	144.7	137.2	135.4
7.5°	489.6	430.0	317.1	230.3	170.7	129.1	107.1	96.1	90.3	86.8	85.6
10°	504.1	422.5	276.6	179.4	120.4	90.9	78.7	74.1	71.8	70.6	70.0
12.5°	524.3	419.6	242.5	138.3	90.9	74.7	68.3	65.4	63.7	61.9	61.3
15°	550.9	420.7	211.2	107.1	75.2	66.6	61.3	58.4	56.1	54.4	54.4
17.5°	578.7	422.5	180.6	86.8	68.3	60.8	55.0	50.9	49.2	47.5	46.9
20°	604.8	421.9	151.0	74.1	61.9	54.4	48.6	44.6	41.7	39.9	39.9
22.5°	629.6	418.4	123.3	66.6	56.7	48.0	41.7	37.6	35.3	33.6	33.6
25°	656.3	411.5	100.7	60.8	50.3	42.2	35.9	31.8	30.1	28.4	28.4
27.5°	677.1	399.9	82.2	55.6	44.6	36.5	30.7	27.2	25.5	24.3	24.3
30°	699.7	383.1	68.3	49.8	38.8	31.3	26.0	23.1	21.4	20.8	20.8
32.5°	724.5	364.6	58.4	44.0	33.0	26.6	22.0	20.3	18.5	17.9	17.9
35°	753.5	348.4	52.7	38.2	28.9	22.6	19.1	17.4	16.2	16.2	16.2
37.5°	786.5	331.6	47.5	33.6	24.9	19.1	16.2	15.6	15.0	14.5	14.5
40°	822.4	313.7	42.8	29.5	21.4	16.2	13.9	13.9	13.3	13.3	13.3
42.5°	862.9	298.0	38.8	26.0	18.5	13.9	12.2	12.2	11.6	11.6	11.6
45°	906.8	283.6	35.3	23.1	16.2	12.2	11.0	10.4	9.8	9.8	9.8
47.5°	958.9	275.5	32.4	20.3	13.9	10.4	9.3	8.7	8.1	7.5	7.5
50°	1025.5	278.9	29.5	16.8	12.2	8.7	7.5	6.9	6.4	5.8	5.8
52.5°	1078.1	277.2	25.5	14.5	9.8	6.9	5.8	5.2	4.6	4.1	4.1
55°	1116.3	270.3	22.0	12.2	7.5	5.8	4.6	3.5	2.9	2.9	2.9
57.5°	1154.0	263.3	18.5	9.8	5.8	4.1	2.9	2.3	2.3	2.3	2.3
60°	1212.4	253.5	16.2	8.1	4.6	2.9	1.7	1.7	1.2	1.2	1.2
62.5°	1283.6	241.3	13.3	6.9	3.5	2.3	1.2	1.2	0.0	0.0	0.0
65°	1361.7	219.9	11.0	5.2	2.9	1.7	1.2	0.0	0.0	0.0	0.0
67.5°	1343.8	176.5	9.3	3.5	2.3	1.2	0.6	0.0	0.0	0.0	0.0
70°	1188.7	119.2	7.5	2.9	1.7	1.2	0.6	0.0	0.0	0.0	0.0
72.5°	931.1	70.6	5.2	2.3	1.2	0.6	0.0	0.0	0.0	0.0	0.0
75°	596.1	35.3	3.5	1.7	1.2	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	199.7	17.4	2.3	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	28.4	5.8	1.2	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.4	2.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.3	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)