

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: P234705

Luminaire Tested: **ARCH-AF24-60-D-U-T2R-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234705
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-AF24-60-D-U-T2R-8027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 800mA 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: 4577 lumens
Efficiency: N/A
Efficacy: 71.5 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): 64
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

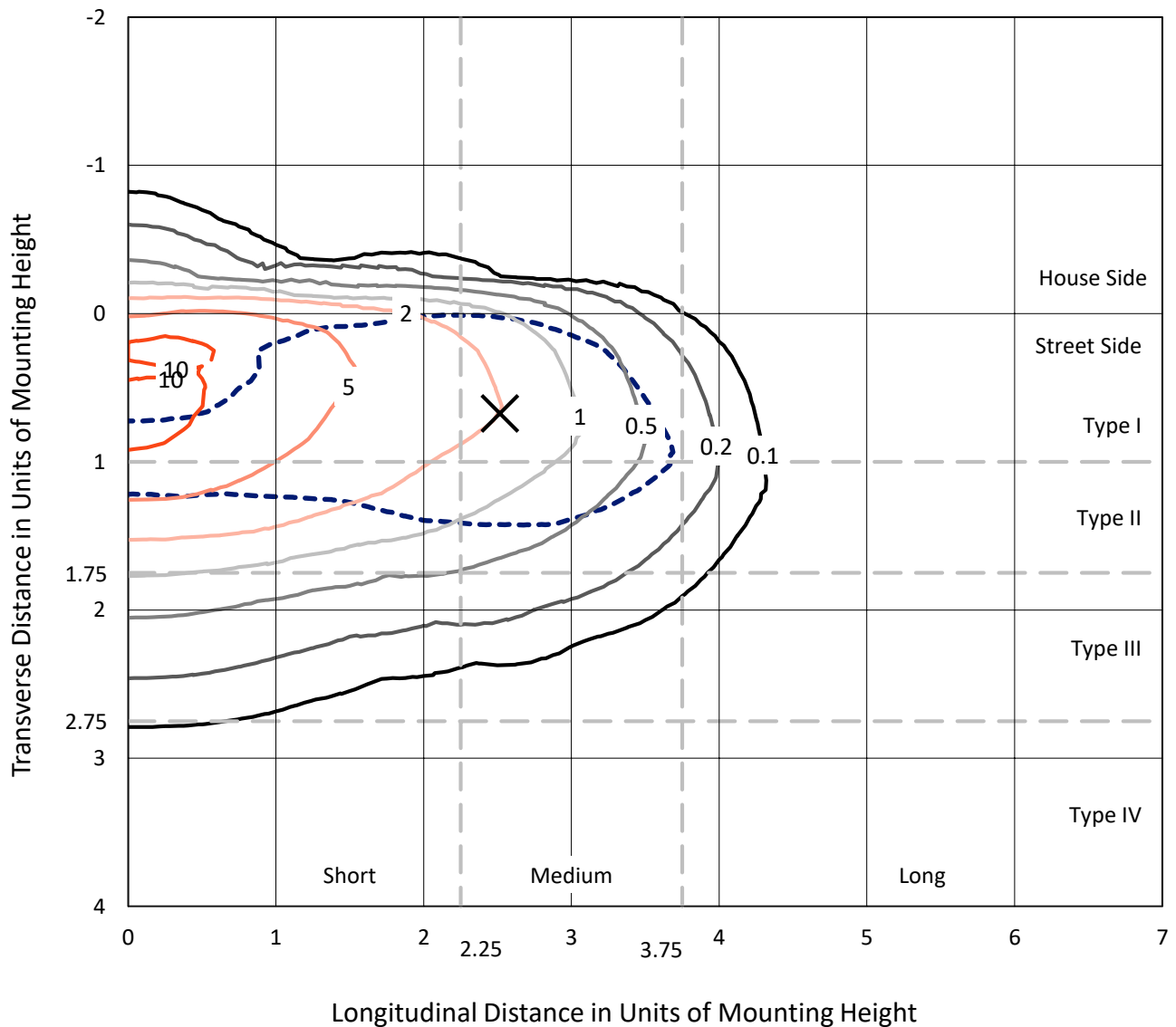


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

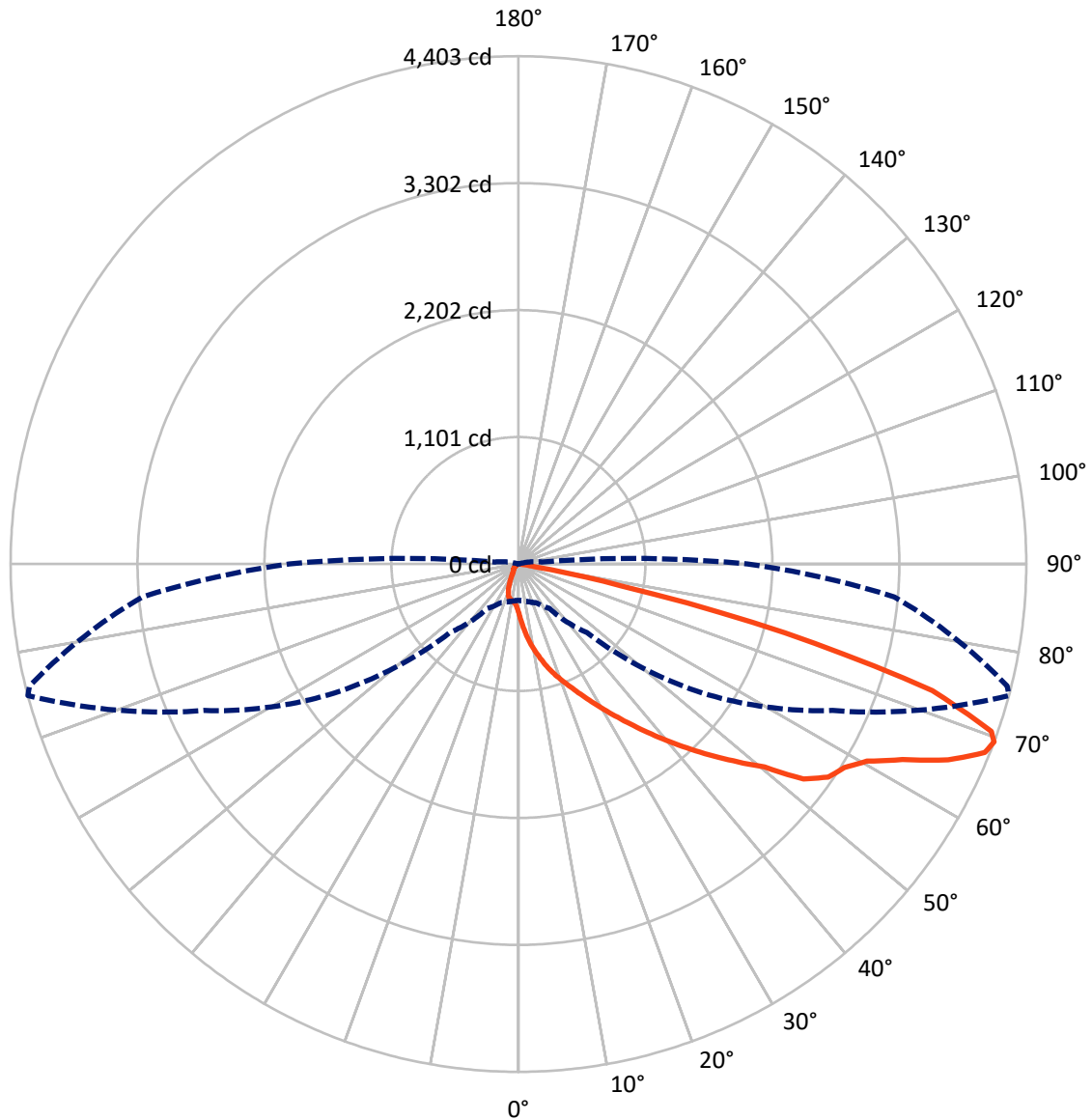


Based on 10 foot mounting height. Maximum calculated value = 11.7 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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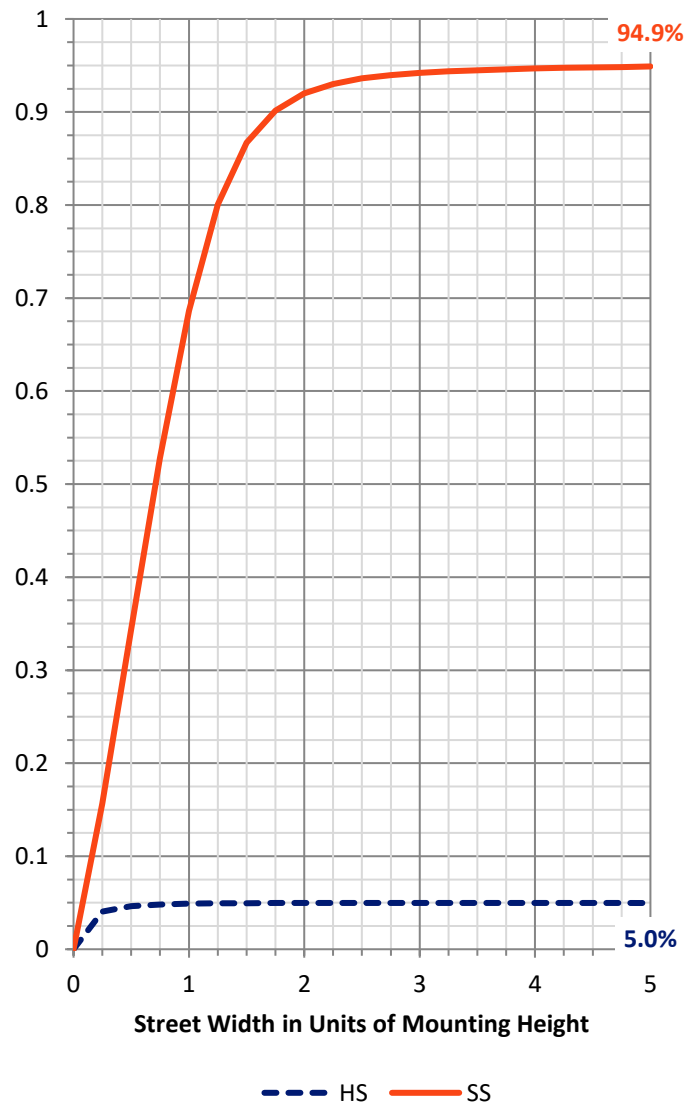
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	228.4	0.0	228.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	4348.6	0.0	4348.6
	% Fixture	95.0	0.0	95.0
Total	Lumens	4577.0	0.0	4577.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.7	1.1
10°-20°	177.5	3.9
20°-30°	338.9	7.4
30°-40°	608.0	13.3
40°-50°	931.5	20.4
50°-60°	1082.6	23.7
60°-70°	958.7	20.9
70°-80°	413.5	9.0
80°-90°	16.6	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°	4577.0	100.0
0°-180°	4577.0	100.0

Coefficient of Utilization



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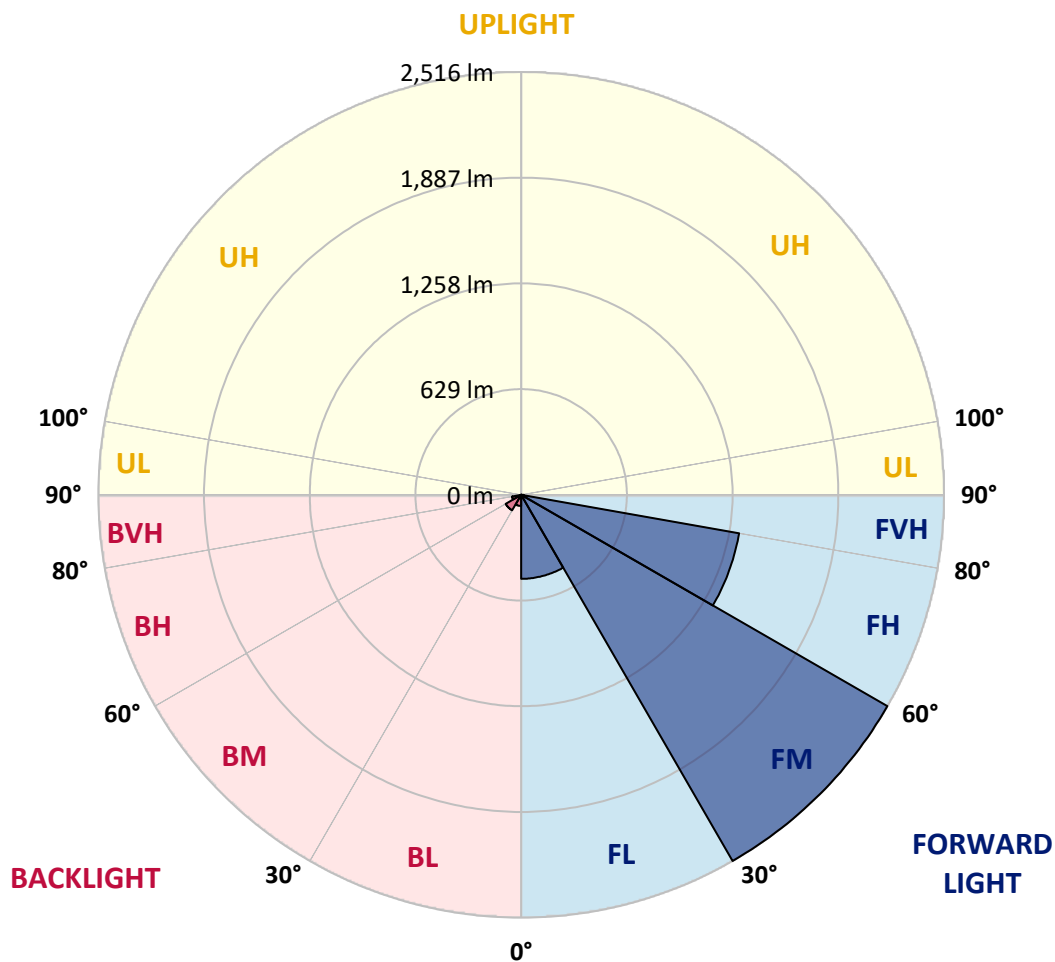
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	499.8	10.9			
FM (30°-60°)	2515.6	55.0			
FH (60°-80°)	1316.9	28.8			G1/1800
FVH (80°-90°)	16.3	0.4			G1/100
BL (0°-30°)	66.3	1.4	B0/110		
BM (30°-60°)	106.5	2.3	B0/220		
BH (60°-80°)	55.3	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°	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9
2.5°	701.6	694.7	687.7	679.8	662.1	631.4	592.9	551.4	500.0	491.1	449.6
5°	851.8	848.8	841.9	831.0	811.3	777.7	734.2	672.9	587.0	572.1	484.2
7.5°	957.5	955.5	949.6	936.8	919.0	885.4	839.9	773.7	673.9	657.1	527.7
10°	1052.4	1051.4	1046.4	1034.6	1016.8	980.2	931.8	862.6	756.9	738.1	578.1
12.5°	1138.3	1139.3	1137.3	1131.4	1118.6	1084.0	1028.7	953.6	837.0	816.2	638.3
15°	1188.7	1191.7	1199.6	1211.5	1215.4	1187.7	1130.4	1047.4	919.0	901.2	707.5
17.5°	1171.9	1174.9	1199.6	1240.1	1278.7	1282.6	1231.2	1136.4	1000.0	982.2	775.7
20°	1131.4	1135.4	1161.1	1216.4	1291.5	1343.9	1323.1	1233.2	1077.1	1055.3	840.9
22.5°	1176.9	1176.9	1184.8	1218.4	1286.6	1368.6	1396.2	1330.0	1156.1	1129.4	906.1
25°	1333.0	1330.0	1313.2	1299.4	1321.1	1394.3	1451.6	1428.8	1249.0	1218.4	975.3
27.5°	1530.6	1544.5	1512.8	1462.4	1413.0	1444.7	1501.0	1526.7	1351.8	1320.2	1046.4
30°	1752.0	1757.9	1720.4	1653.2	1566.2	1535.6	1559.3	1610.7	1463.4	1428.8	1120.6
32.5°	1951.6	1946.6	1915.0	1844.9	1737.1	1670.9	1634.4	1677.9	1585.0	1545.5	1196.6
35°	2128.5	2132.4	2093.9	2012.8	1907.1	1837.0	1750.0	1753.9	1721.3	1675.9	1284.6
37.5°	2287.5	2280.6	2244.1	2163.0	2067.2	1991.1	1899.2	1833.0	1870.5	1823.1	1383.4
40°	2417.0	2410.1	2371.5	2292.5	2202.6	2140.3	2068.2	1938.7	2027.7	1973.3	1489.1
42.5°	2519.8	2511.9	2479.2	2403.2	2316.2	2260.9	2226.3	2069.2	2195.6	2141.3	1607.7
45°	2570.2	2563.2	2543.5	2486.2	2410.1	2361.7	2378.5	2219.4	2375.5	2330.0	1738.1
47.5°	2510.9	2507.9	2530.6	2520.7	2477.3	2451.6	2509.9	2383.4	2564.2	2519.8	1888.3
50°	2331.0	2336.0	2402.2	2484.2	2504.9	2535.6	2617.6	2556.3	2766.8	2719.4	2061.3
52.5°	1887.3	1920.9	2120.5	2318.2	2471.3	2586.9	2744.1	2803.4	3096.8	3050.4	2331.0
55°	1409.1	1422.9	1640.3	1978.3	2336.0	2583.0	2837.9	2948.6	3259.9	3212.4	2402.2
57.5°	1117.6	1122.5	1230.2	1575.1	2057.3	2494.1	2887.3	3001.0	3331.0	3291.5	2507.9
60°	877.5	883.4	961.5	1198.6	1665.0	2253.9	2816.2	3046.4	3470.3	3438.7	2692.7
62.5°	682.8	688.7	736.2	875.5	1249.0	1884.4	2672.9	3119.6	3735.2	3720.3	2995.1
65°	528.7	530.6	563.2	628.5	882.4	1484.2	2498.0	3187.7	4092.9	4080.0	3240.1
67.5°	390.3	393.3	416.0	456.5	595.8	1066.2	2211.5	3135.4	4362.6	4325.1	3329.0
69°	315.2	318.2	337.9	370.6	470.4	839.9	1949.6	3005.9	4403.1	4367.6	3272.7
70°	269.8	271.7	291.5	319.2	401.2	713.4	1742.1	2894.3	4349.8	4315.2	3144.3
72.5°	172.9	182.8	202.6	220.4	265.8	472.3	1175.9	2400.2	3753.0	3693.7	2462.4
75°	95.8	98.8	134.4	156.1	176.9	307.3	654.1	1497.0	2387.3	2345.8	1317.2
77.5°	79.1	81.0	94.9	118.6	118.6	171.9	247.0	589.9	908.1	819.2	356.7
80°	55.3	57.3	72.1	78.1	85.0	96.8	80.0	129.4	140.3	124.5	53.4
82.5°	38.5	40.5	49.4	64.2	68.2	45.5	29.6	38.5	40.5	40.5	20.8
85°	6.9	9.9	36.6	53.4	40.5	13.8	16.8	13.8	12.8	13.8	4.9
87.5°	0.0	0.0	22.7	25.7	21.7	5.9	6.9	4.9	3.0	4.0	2.0
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°	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9
2.5°	428.9	408.1	372.5	346.8	325.1	308.3	301.4	290.5	282.6	286.6	281.6
5°	440.7	404.1	346.8	310.3	284.6	262.8	245.1	231.2	220.4	218.4	216.4
7.5°	459.5	407.1	332.0	286.6	248.0	214.4	186.8	166.0	150.2	150.2	144.3
10°	485.2	415.0	323.1	262.8	205.5	160.1	132.4	112.6	104.7	103.8	101.8
12.5°	520.7	429.8	316.2	232.2	160.1	116.6	99.8	92.9	89.9	88.9	87.9
15°	569.2	451.6	308.3	194.7	121.5	95.8	88.9	83.0	80.0	79.1	78.1
17.5°	615.6	471.3	291.5	156.1	98.8	87.0	79.1	74.1	70.2	69.2	69.2
20°	659.1	488.1	262.8	121.5	88.9	78.1	70.2	64.2	60.3	59.3	59.3
22.5°	704.5	502.0	227.3	98.8	81.0	69.2	61.3	55.3	51.4	50.4	49.4
25°	753.0	511.9	186.8	87.9	73.1	61.3	52.4	47.4	44.5	43.5	42.5
27.5°	805.3	515.8	148.2	80.0	64.2	53.4	45.5	40.5	38.5	37.5	37.5
30°	852.8	511.9	114.6	71.1	56.3	46.4	39.5	35.6	33.6	32.6	32.6
32.5°	902.2	502.0	91.9	63.2	49.4	39.5	33.6	30.6	29.6	28.7	28.7
35°	954.5	489.1	79.1	56.3	42.5	34.6	29.6	27.7	26.7	25.7	25.7
37.5°	1015.8	473.3	72.1	50.4	37.5	30.6	25.7	24.7	23.7	23.7	23.7
40°	1085.0	453.6	67.2	45.5	33.6	26.7	22.7	21.7	20.8	20.8	20.8
42.5°	1158.1	430.8	62.3	40.5	29.6	22.7	19.8	19.8	18.8	18.8	17.8
45°	1240.1	408.1	57.3	35.6	25.7	19.8	16.8	15.8	15.8	14.8	14.8
47.5°	1337.0	387.4	52.4	31.6	22.7	16.8	14.8	13.8	12.8	11.9	11.9
50°	1473.3	385.4	46.4	27.7	20.8	13.8	11.9	10.9	9.9	8.9	8.9
52.5°	1608.7	367.6	39.5	22.7	16.8	11.9	8.9	7.9	6.9	6.9	5.9
55°	1639.3	337.9	34.6	19.8	12.8	8.9	6.9	4.9	4.9	4.0	4.0
57.5°	1706.5	324.1	29.6	15.8	9.9	6.9	4.0	3.0	3.0	3.0	3.0
60°	1838.9	320.2	25.7	13.8	6.9	4.9	3.0	2.0	2.0	1.0	1.0
62.5°	2021.7	316.2	21.7	11.9	4.9	3.0	2.0	1.0	0.0	0.0	0.0
65°	2122.5	289.5	17.8	8.9	4.0	3.0	1.0	0.0	0.0	0.0	0.0
67.5°	2095.8	239.1	15.8	5.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0
69°	1984.2	201.6	12.8	4.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0
70°	1849.8	173.9	11.9	4.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0
72.5°	1313.2	90.9	7.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0
75°	613.6	40.5	4.9	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	135.4	18.8	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	25.7	6.9	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.9	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	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)