

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: P348566

Luminaire Tested: **ARCH-N-PA1-50-827-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348566
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-827-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5036 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

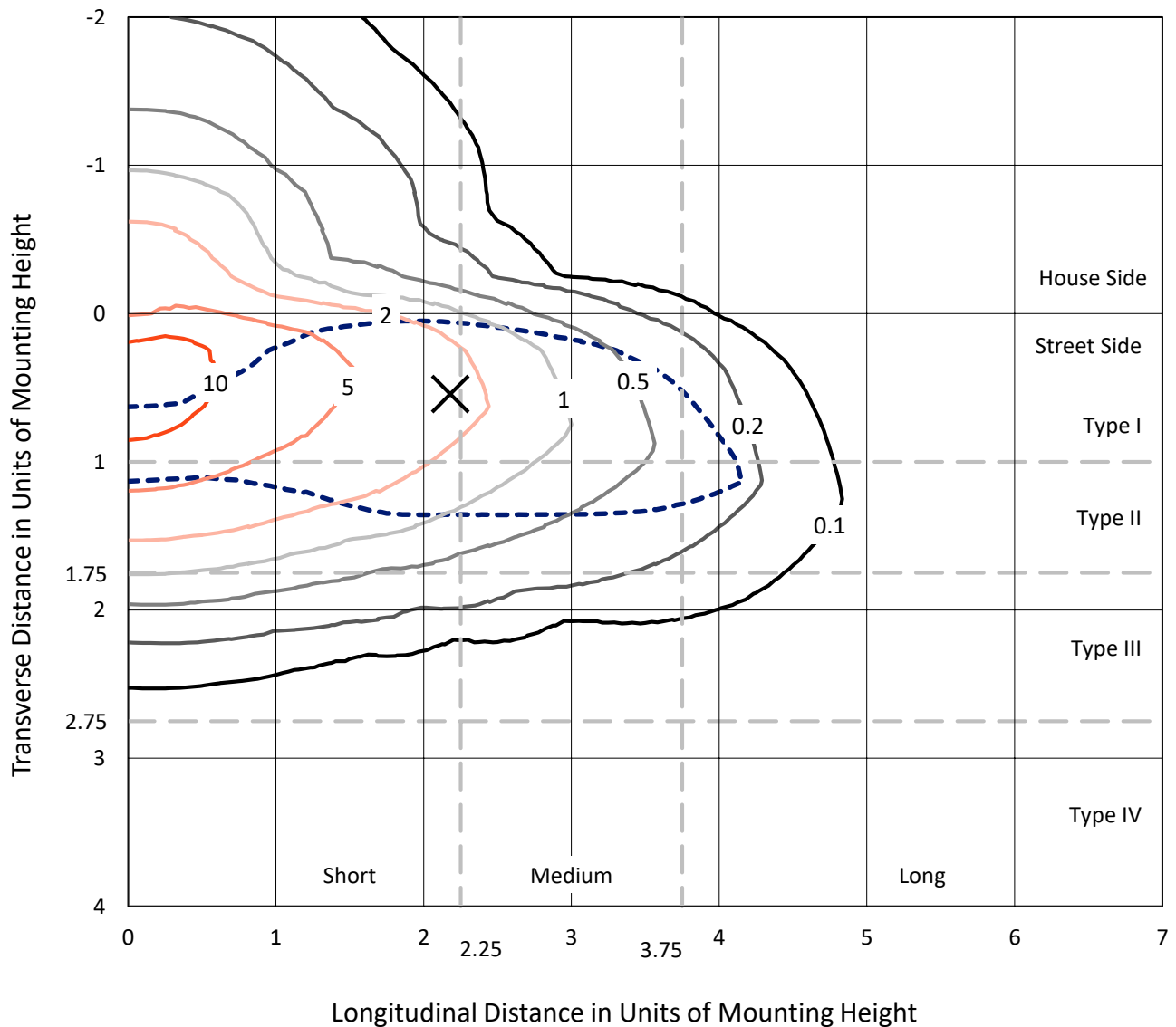
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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 CATALOG NUMBER: ARCH-N-PA1-50-827-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

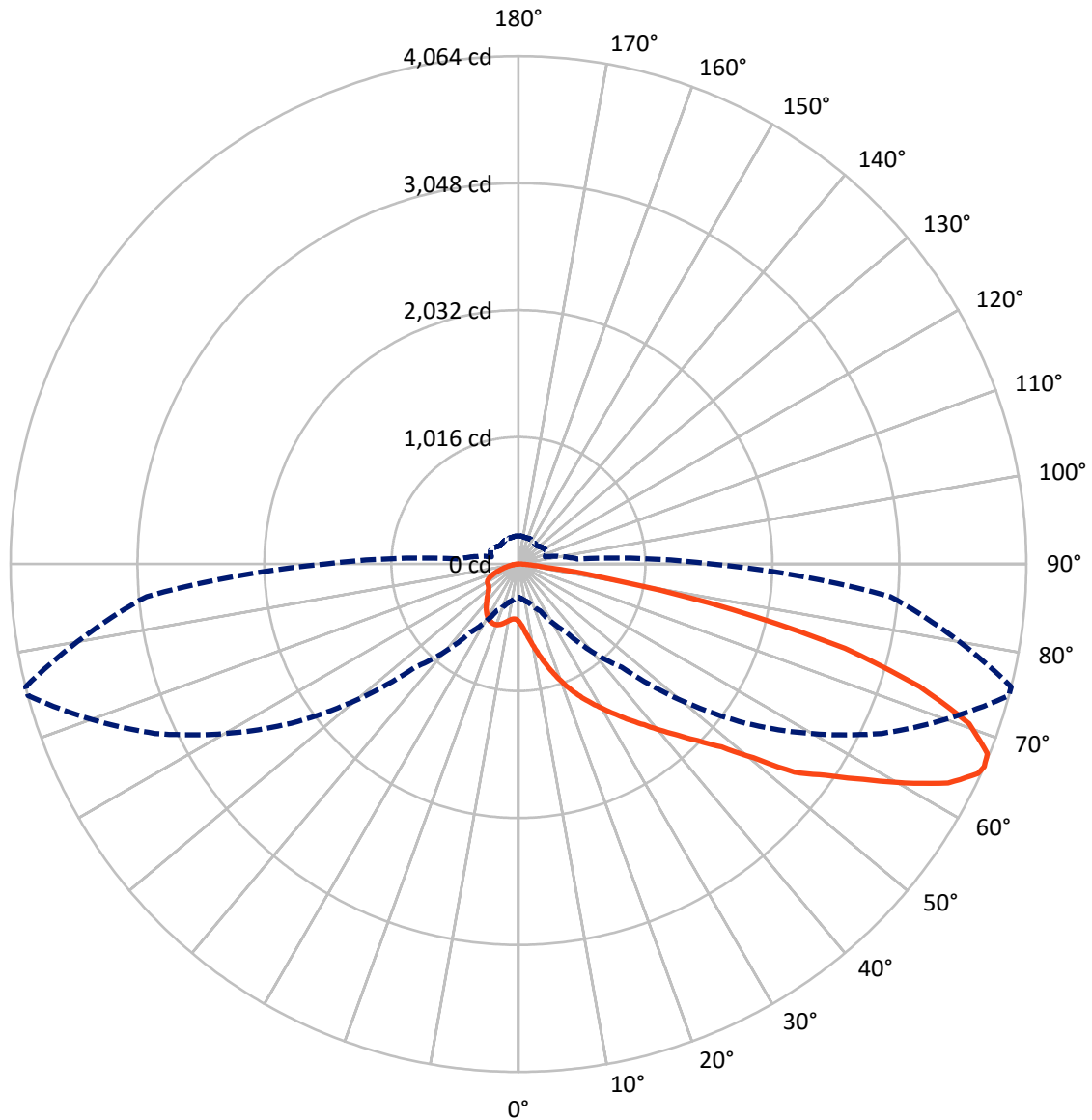
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.2 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P348566
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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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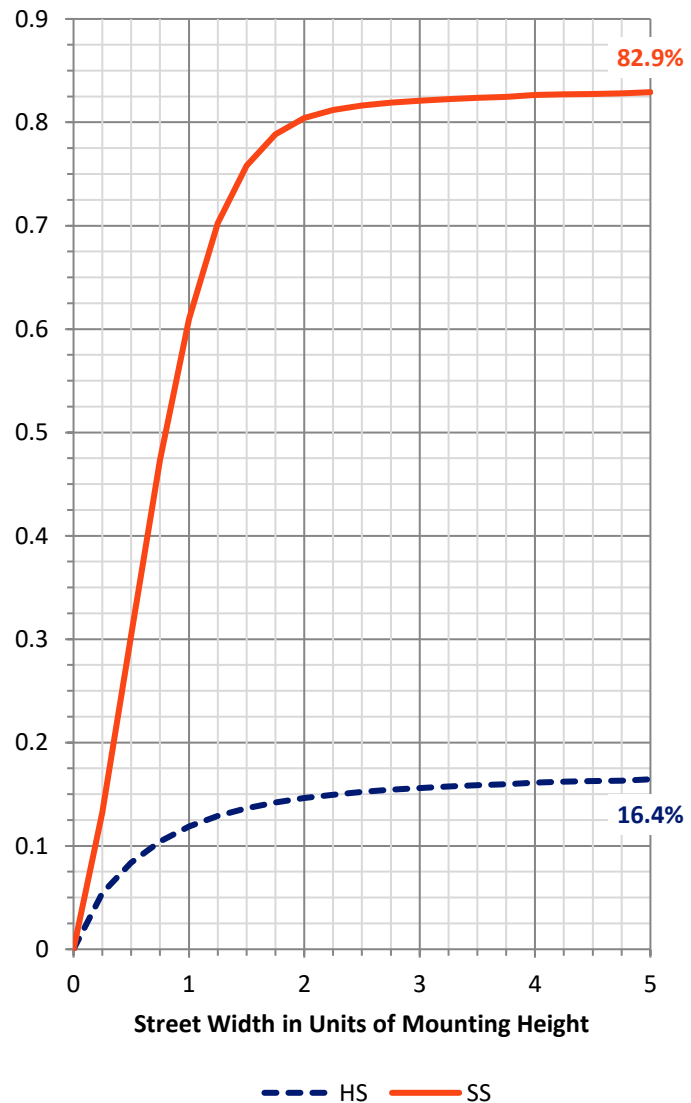
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	847.4	0.0	847.4
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	4188.6	0.0	4188.6
	% Fixture	83.2	0.0	83.2
Total	Lumens	5036.0	0.0	5036.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	1.1
10°-20°	219.6	4.4
20°-30°	426.8	8.5
30°-40°	696.6	13.8
40°-50°	951.7	18.9
50°-60°	1108.5	22.0
60°-70°	993.8	19.7
70°-80°	502.2	10.0
80°-90°	81.1	1.6
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°	5036.0	100.0
0°-180°	5036.0	100.0



REPORT NUMBER: P348566

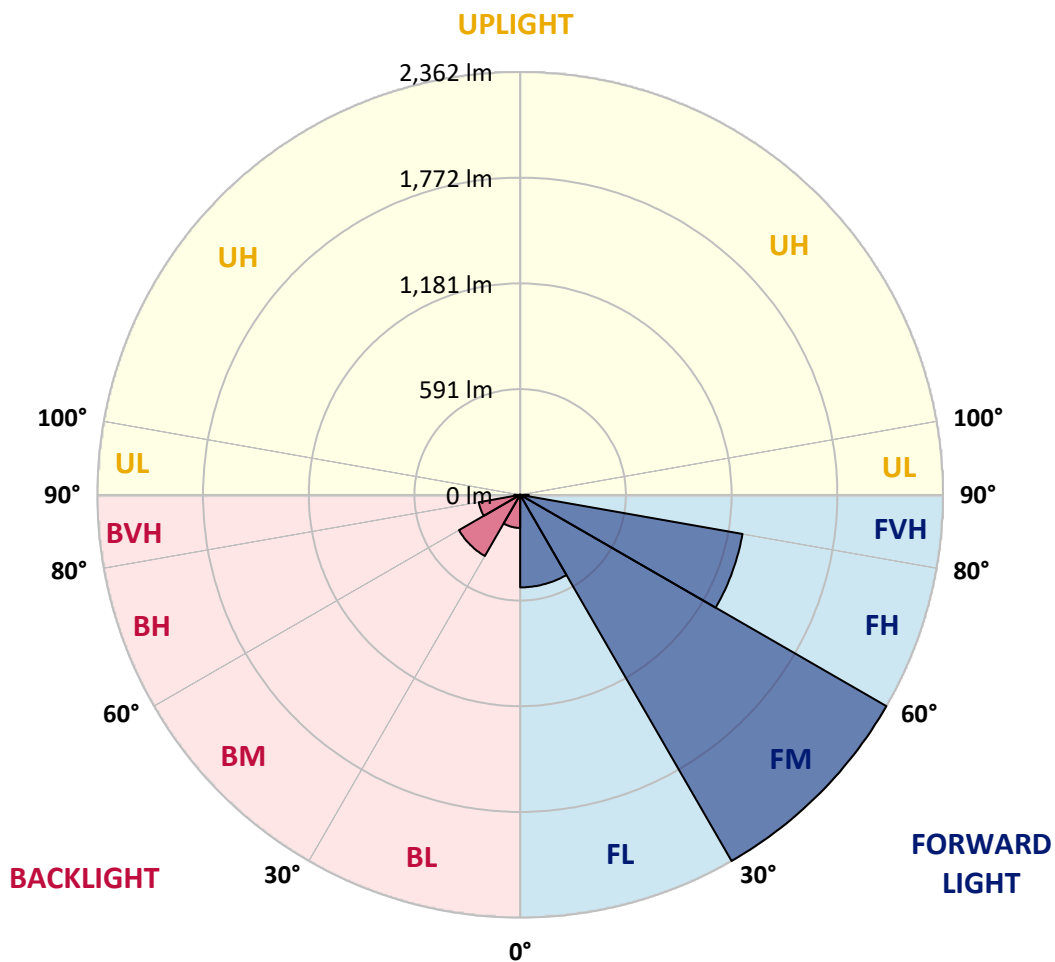
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	517.2	10.3			
FM	(30°-60°)	2362.2	46.9			
FH	(60°-80°)	1261.3	25.0			G1/1800
FVH	(80°-90°)	47.9	1.0			G1/100
BL	(0°-30°)	184.8	3.7	B1/500		
BM	(30°-60°)	394.6	7.8	B1/1000		
BH	(60°-80°)	234.8	4.7	B1/500		G1/500
BVH	(80°-90°)	33.2	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
2.5°	610.5	601.3	600.4	586.9	583.9	558.0	539.1	519.2	496.7	492.2	474.4
5°	784.2	783.4	771.6	749.5	732.3	688.1	644.5	598.4	547.8	539.6	499.6
7.5°	940.5	939.1	930.1	906.3	881.3	827.1	764.9	694.1	612.1	599.9	533.6
10°	1059.1	1058.6	1055.5	1038.1	1016.9	964.9	896.2	799.6	686.8	670.2	576.2
12.5°	1150.8	1151.8	1153.9	1147.7	1137.6	1093.3	1022.9	911.4	766.4	750.0	623.5
15°	1212.8	1215.9	1226.5	1235.2	1240.5	1213.4	1145.1	1025.8	855.7	836.0	676.0
17.5°	1244.1	1247.5	1265.8	1292.2	1316.4	1313.7	1259.5	1134.9	941.3	922.4	732.4
20°	1271.1	1273.7	1294.2	1325.8	1368.8	1387.7	1357.3	1239.9	1035.2	1012.6	792.3
22.5°	1349.4	1352.7	1358.8	1376.8	1414.7	1449.6	1434.9	1339.2	1121.2	1100.2	849.0
25°	1500.6	1504.5	1491.2	1476.0	1483.1	1507.4	1510.1	1429.8	1208.4	1184.6	910.1
27.5°	1682.7	1688.3	1665.6	1626.4	1592.2	1582.8	1579.6	1504.0	1291.7	1264.1	970.4
30°	1861.0	1870.7	1841.1	1790.4	1727.6	1683.5	1650.9	1576.7	1373.7	1347.4	1027.3
32.5°	2035.2	2031.3	1988.3	1938.8	1865.2	1810.0	1731.0	1654.6	1466.0	1435.8	1083.9
35°	2154.5	2155.9	2116.1	2057.2	1987.1	1944.7	1838.4	1738.7	1560.2	1532.4	1148.2
37.5°	2256.1	2249.8	2204.6	2149.7	2089.4	2071.3	1964.1	1831.4	1662.3	1631.9	1216.6
40°	2289.9	2282.6	2253.0	2213.5	2165.1	2163.6	2102.7	1936.4	1777.7	1747.6	1293.7
42.5°	2269.4	2260.0	2247.9	2237.1	2222.2	2229.1	2233.0	2059.5	1904.6	1870.9	1382.9
45°	2193.7	2179.5	2188.0	2211.5	2243.8	2282.4	2350.6	2195.7	2046.6	2018.4	1487.8
47.5°	2077.2	2064.4	2091.1	2141.2	2229.1	2326.9	2461.9	2346.2	2216.2	2188.2	1637.0
50°	1913.5	1917.2	1955.3	2046.5	2179.3	2347.4	2599.0	2545.4	2462.8	2436.6	1840.6
52.5°	1644.7	1645.4	1752.8	1902.3	2091.1	2336.8	2675.1	2799.9	2799.4	2767.8	2034.5
55°	1395.1	1410.3	1495.3	1694.1	1948.2	2294.4	2728.3	2923.7	3020.5	2983.4	2215.2
57.5°	1151.3	1160.2	1240.7	1440.4	1744.2	2181.4	2782.8	3072.3	3275.2	3251.8	2439.9
60°	874.0	887.7	970.9	1155.4	1483.3	1980.8	2788.0	3227.3	3579.7	3556.1	2690.7
62.5°	567.3	590.9	668.8	841.7	1167.7	1692.4	2669.0	3328.7	3868.3	3859.9	2913.3
65°	326.0	343.8	398.0	531.4	805.6	1330.3	2386.0	3289.7	4045.9	4041.1	2996.5
66°	266.4	277.5	319.0	415.3	664.7	1168.2	2221.5	3207.5	4063.5	4063.7	2987.0
67.5°	213.0	218.0	236.6	297.3	490.5	926.0	1927.6	3026.1	4041.7	4047.6	2925.2
70°	176.3	178.8	184.6	199.3	267.7	558.4	1368.2	2554.8	3822.0	3826.6	2684.3
72.5°	158.1	159.7	161.9	164.0	188.9	312.0	835.7	2043.7	3350.9	3356.9	2317.3
75°	143.3	144.1	143.8	144.0	158.5	198.8	431.9	1525.9	2709.5	2697.5	1775.1
77.5°	125.8	126.7	125.0	125.3	140.2	152.8	214.9	1068.2	1828.5	1744.0	1000.2
80°	106.3	107.0	106.3	107.5	122.1	115.4	125.0	600.9	808.5	764.7	355.6
82.5°	80.4	83.3	85.3	90.1	100.5	82.1	83.6	234.1	246.2	234.4	109.1
85°	35.2	42.9	64.3	68.9	75.6	49.2	54.9	95.4	100.2	97.1	39.7
87.5°	9.2	10.1	31.8	40.0	41.9	22.2	28.6	43.4	45.8	43.4	13.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P348566

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
2.5°	465.0	456.7	441.6	428.3	418.2	411.3	404.5	401.1	399.0	397.0	397.3
5°	479.9	463.0	437.2	418.9	408.6	402.1	398.7	397.3	396.5	394.4	394.4
7.5°	502.3	478.4	442.8	424.0	416.0	411.0	409.0	408.3	407.2	404.8	405.2
10°	530.5	497.0	454.6	436.3	429.0	423.5	420.6	419.6	417.7	414.9	415.3
12.5°	563.7	520.1	470.2	451.0	442.1	434.8	430.0	427.1	423.8	420.2	420.4
15°	599.9	545.2	486.9	464.2	452.0	441.8	434.1	429.1	424.0	419.6	419.4
17.5°	636.7	569.5	499.7	471.4	454.9	441.4	431.0	423.3	417.0	411.5	411.0
20°	676.3	591.4	506.9	470.7	449.5	433.4	419.6	410.0	403.0	397.5	396.6
22.5°	716.7	611.9	508.1	463.7	437.3	417.7	403.1	392.5	385.4	379.7	377.7
25°	753.6	627.8	503.2	450.2	420.4	399.2	385.0	374.2	368.4	361.8	359.7
27.5°	787.3	638.9	493.2	432.9	401.4	380.6	367.2	358.0	351.7	346.5	344.8
30°	817.6	644.9	477.0	412.4	381.9	363.0	351.7	345.4	339.9	333.4	332.2
32.5°	846.3	644.9	456.1	390.0	362.6	347.4	340.7	336.8	330.6	324.3	322.6
35°	875.0	641.0	431.5	366.6	344.8	336.3	335.9	331.3	321.9	313.4	311.2
37.5°	905.3	632.9	403.8	344.7	330.3	331.3	334.2	324.0	310.6	298.5	295.3
40°	939.5	621.8	375.1	325.7	318.2	329.1	329.6	313.4	287.4	276.3	273.4
42.5°	979.6	610.7	348.4	308.9	308.6	322.4	320.9	290.5	274.9	269.3	267.7
45°	1032.5	604.4	323.1	293.0	301.1	311.7	306.0	277.8	271.3	268.1	266.7
47.5°	1115.7	607.6	299.9	280.4	293.5	300.9	278.3	272.7	268.1	264.1	262.8
50°	1220.0	605.7	281.1	271.7	285.0	289.6	265.9	266.0	263.6	259.2	257.1
52.5°	1298.5	591.0	268.9	266.7	277.5	269.6	258.0	259.5	258.3	251.8	249.6
55°	1374.2	578.4	262.8	264.8	272.0	244.7	248.8	252.5	251.3	245.0	244.0
57.5°	1468.4	576.0	259.0	265.3	267.4	232.2	239.9	244.8	244.0	241.2	240.7
60°	1583.8	576.7	255.6	266.2	262.3	222.9	231.5	237.8	238.3	237.8	237.5
62.5°	1647.3	558.0	247.0	263.8	253.2	214.9	222.8	232.0	232.2	233.2	233.0
65°	1593.4	502.3	231.1	255.4	238.0	208.2	215.2	225.3	222.8	227.4	227.4
66°	1541.1	470.2	223.3	250.0	231.5	205.7	212.9	221.9	218.7	225.0	225.0
67.5°	1434.2	416.0	209.1	238.3	222.3	202.1	210.1	216.3	211.8	221.2	220.5
70°	1239.0	321.8	180.5	212.0	207.0	196.8	206.4	205.0	198.5	212.9	210.1
72.5°	1044.6	244.5	145.0	177.5	184.0	190.1	201.1	190.6	182.4	192.5	186.5
75°	810.6	183.8	114.5	138.0	155.4	179.7	194.7	174.0	162.2	161.2	158.0
77.5°	438.2	126.2	90.8	105.3	123.4	166.7	190.5	156.3	138.5	134.4	131.8
80°	173.5	82.1	66.0	79.8	86.3	147.9	180.2	135.6	114.2	110.1	106.2
82.5°	71.6	48.6	42.6	53.5	56.2	126.5	161.7	111.1	88.2	122.1	129.6
85°	30.8	26.7	25.3	27.7	31.8	88.7	128.7	84.8	95.2	85.0	67.5
87.5°	9.2	11.3	10.8	10.6	11.6	21.2	68.6	47.2	69.9	26.5	19.8
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)