

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: P214675

Luminaire Tested: **ARCH-AF24-60-D-U-T2R-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214675
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-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 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: 5891 lumens
Efficiency: N/A
Efficacy: 92.0 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

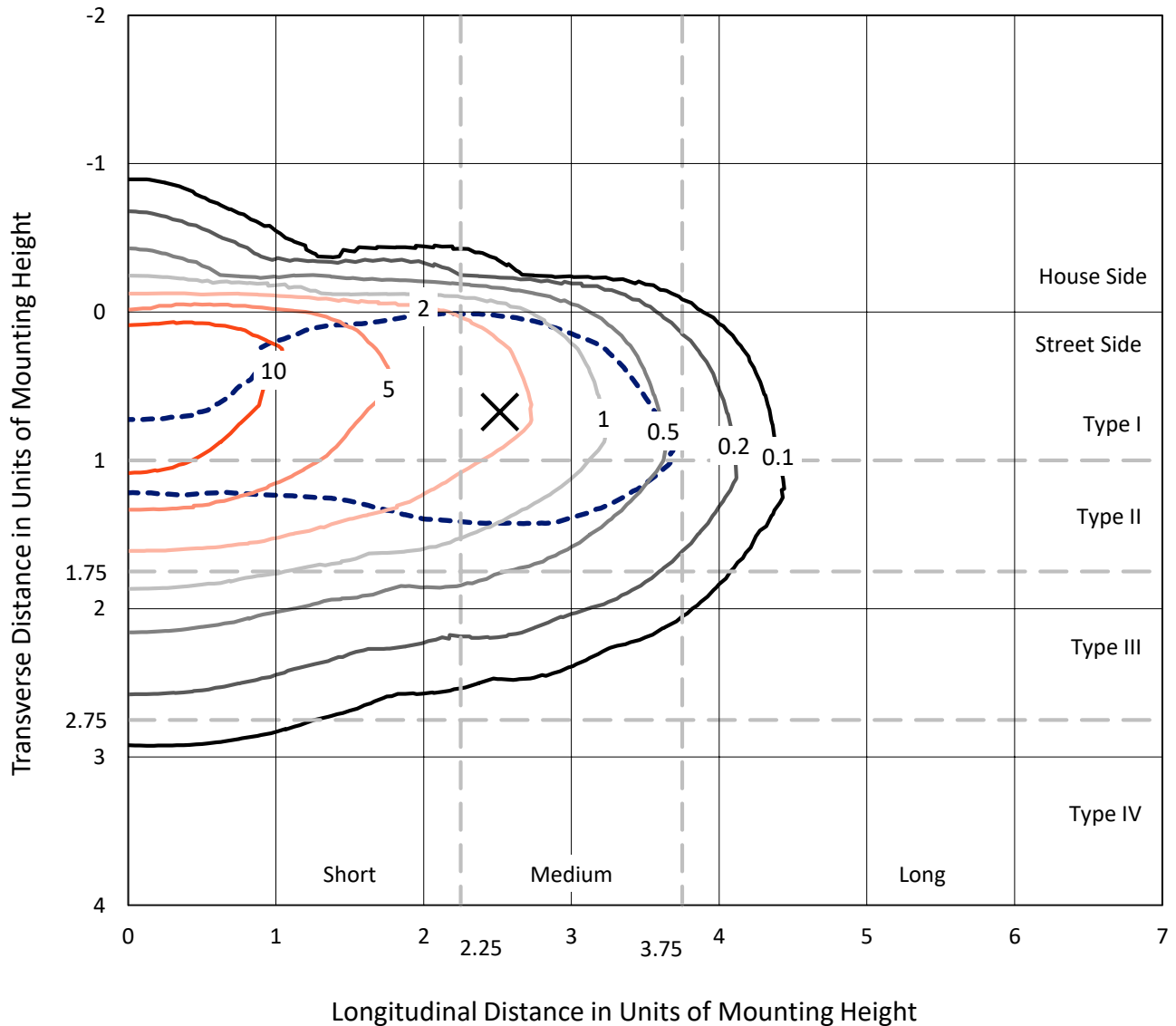


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

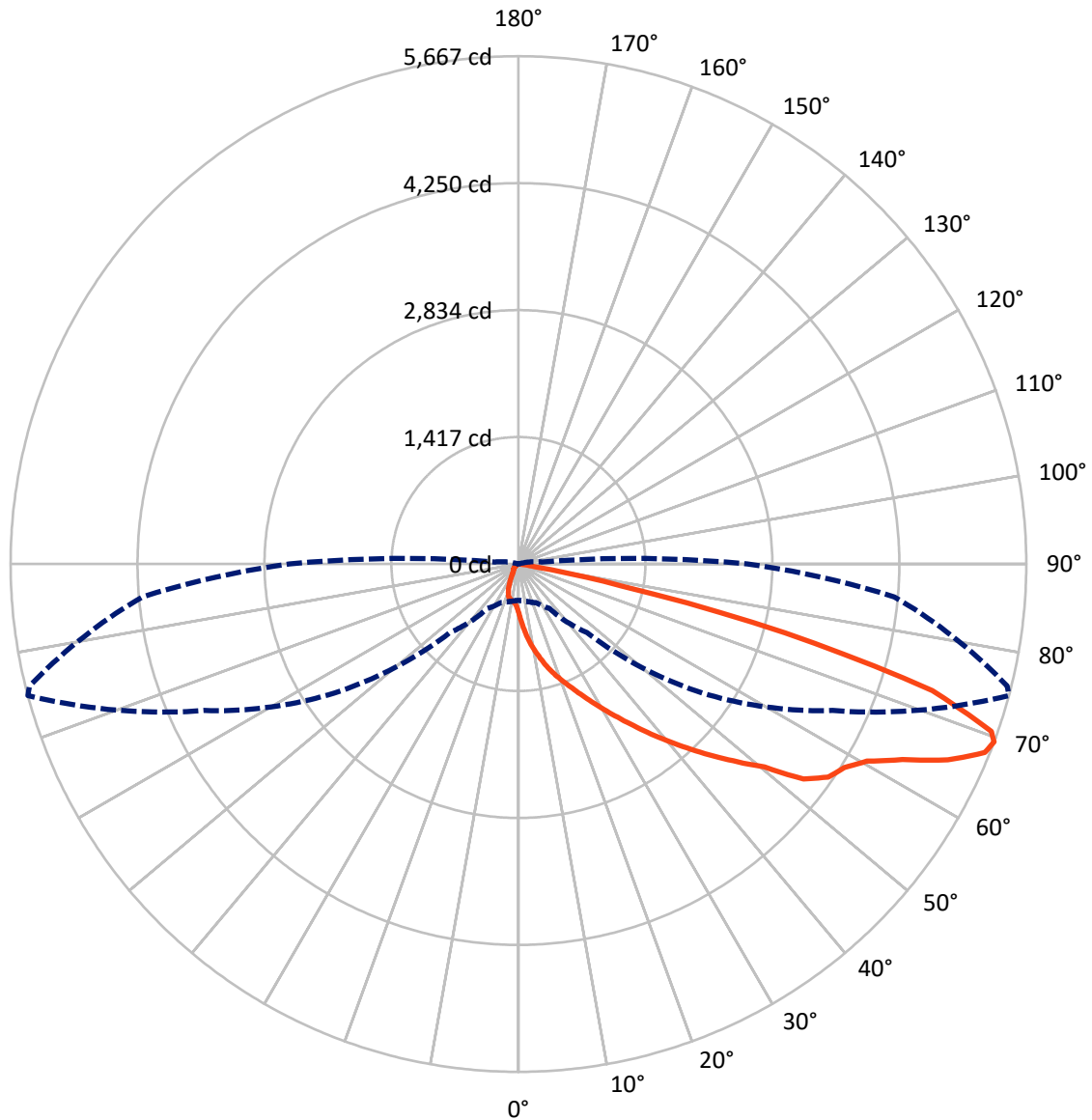


Based on 10 foot mounting height. Maximum calculated value = 15 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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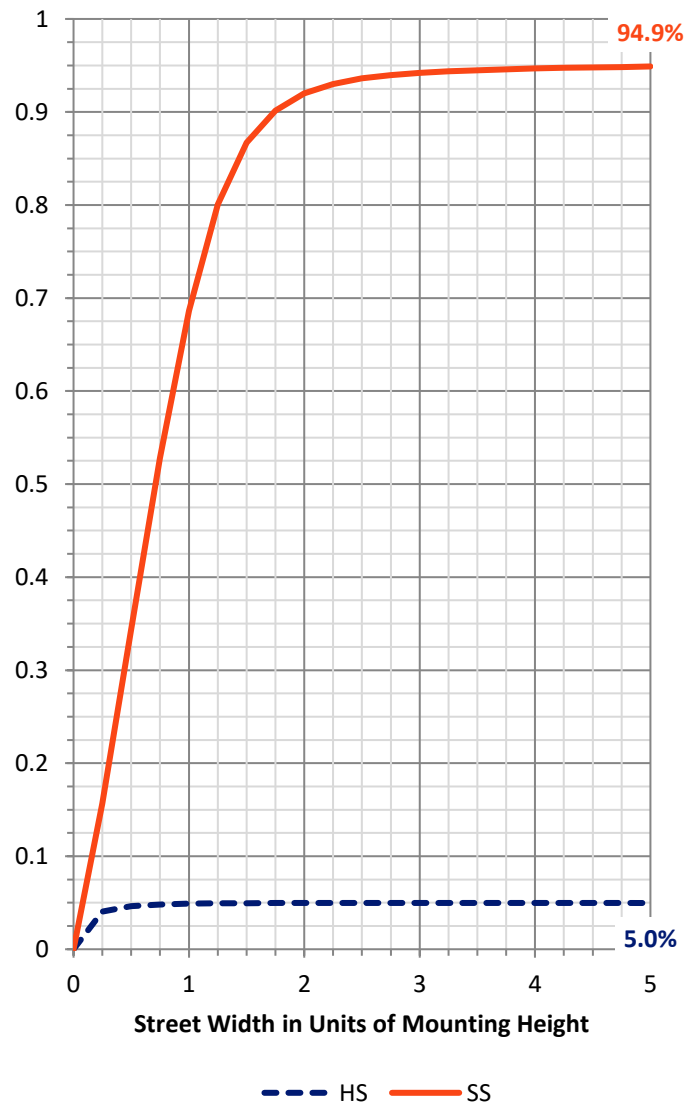
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	293.9	0.0	293.9
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	5597.1	0.0	5597.1
	% Fixture	95.0	0.0	95.0
Total	Lumens	5891.0	0.0	5891.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	1.1
10°-20°	228.5	3.9
20°-30°	436.2	7.4
30°-40°	782.5	13.3
40°-50°	1198.9	20.4
50°-60°	1393.4	23.7
60°-70°	1233.9	20.9
70°-80°	532.2	9.0
80°-90°	21.3	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°	5891.0	100.0
0°-180°	5891.0	100.0

Coefficient of Utilization



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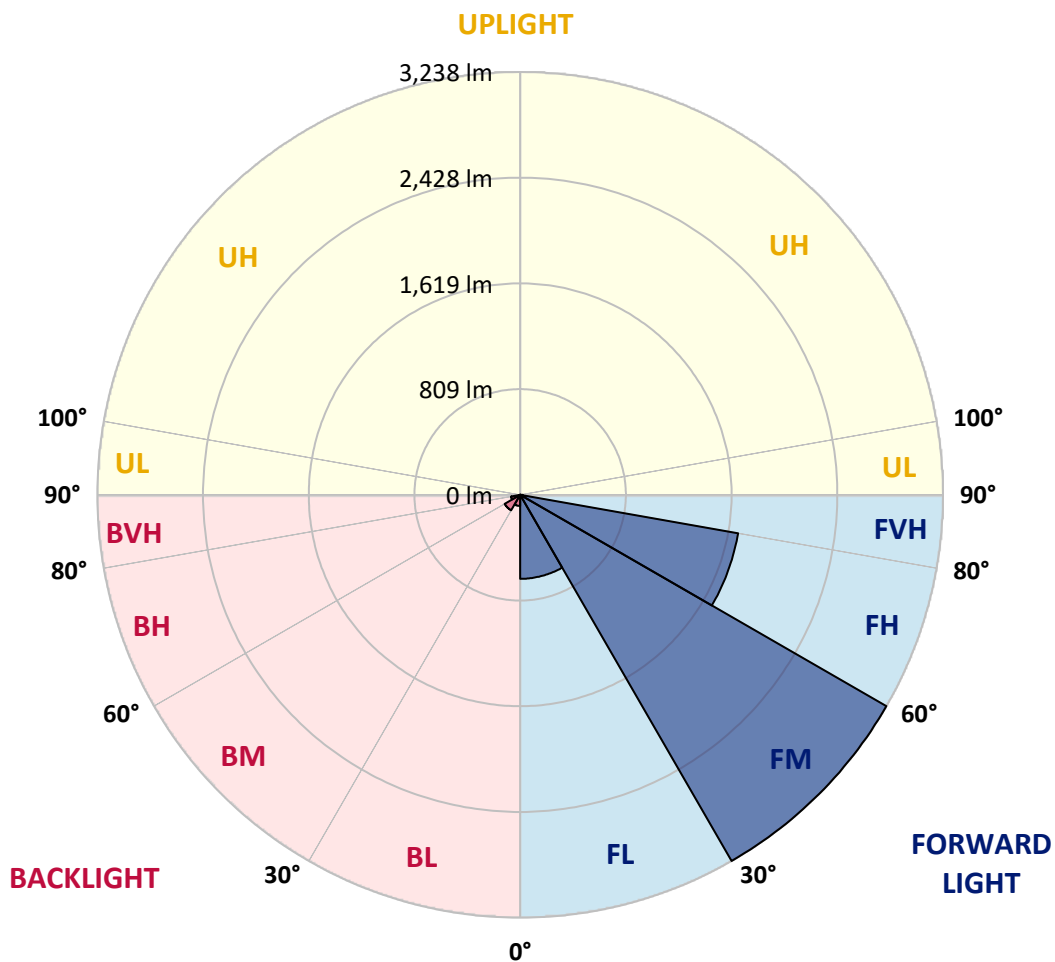
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	643.3	10.9			
FM	(30°-60°)	3237.8	55.0			
FH	(60°-80°)	1694.9	28.8			G1/1800
FVH	(80°-90°)	21.0	0.4			G1/100
BL	(0°-30°)	85.4	1.4	B0/110		
BM	(30°-60°)	137.0	2.3	B0/220		
BH	(60°-80°)	71.2	1.2	B0/110		G0/110
BVH	(80°-90°)	0.3	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°	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2
2.5°	903.0	894.1	885.2	875.0	852.1	812.7	763.1	709.7	643.5	632.1	578.7
5°	1096.3	1092.5	1083.6	1069.6	1044.2	1000.9	945.0	866.1	755.5	736.4	623.2
7.5°	1232.4	1229.9	1222.2	1205.7	1182.8	1139.6	1081.0	995.8	867.4	845.8	679.2
10°	1354.5	1353.2	1346.9	1331.6	1308.7	1261.6	1199.3	1110.3	974.2	950.1	744.0
12.5°	1465.1	1466.4	1463.9	1456.2	1439.7	1395.2	1324.0	1227.3	1077.2	1050.5	821.6
15°	1530.0	1533.8	1544.0	1559.3	1564.3	1528.7	1455.0	1348.1	1182.8	1159.9	910.6
17.5°	1508.4	1512.2	1544.0	1596.1	1645.7	1650.8	1584.7	1462.6	1287.1	1264.2	998.4
20°	1456.2	1461.3	1494.4	1565.6	1662.3	1729.7	1703.0	1587.2	1386.3	1358.3	1082.3
22.5°	1514.7	1514.7	1524.9	1568.2	1655.9	1761.5	1797.1	1711.9	1488.0	1453.7	1166.3
25°	1715.7	1711.9	1690.3	1672.4	1700.4	1794.5	1868.3	1839.1	1607.6	1568.2	1255.3
27.5°	1970.1	1987.9	1947.2	1882.3	1818.7	1859.4	1931.9	1965.0	1739.9	1699.2	1346.9
30°	2254.9	2262.6	2214.2	2127.8	2015.8	1976.4	2006.9	2073.1	1883.6	1839.1	1442.2
32.5°	2511.8	2505.5	2464.8	2374.5	2235.9	2150.7	2103.6	2159.6	2040.0	1989.1	1540.2
35°	2739.5	2744.6	2695.0	2590.7	2454.6	2364.3	2252.4	2257.5	2215.5	2157.0	1653.4
37.5°	2944.3	2935.4	2888.3	2784.0	2660.7	2562.7	2444.4	2359.2	2407.6	2346.5	1780.6
40°	3110.9	3102.0	3052.4	2950.6	2834.9	2754.8	2661.9	2495.3	2609.8	2539.8	1916.6
42.5°	3243.1	3233.0	3191.0	3093.1	2981.2	2909.9	2865.4	2663.2	2826.0	2756.0	2069.3
45°	3308.0	3299.1	3273.7	3199.9	3102.0	3039.7	3061.3	2856.5	3057.5	2999.0	2237.1
47.5°	3231.7	3227.9	3257.1	3244.4	3188.5	3155.4	3230.4	3067.6	3300.4	3243.1	2430.5
50°	3000.2	3006.6	3091.8	3197.4	3224.1	3263.5	3369.1	3290.2	3561.1	3500.1	2653.0
52.5°	2429.2	2472.4	2729.3	2983.7	3180.8	3329.6	3531.9	3608.2	3985.9	3926.1	3000.2
55°	1813.6	1831.4	2111.2	2546.2	3006.6	3324.5	3652.7	3795.1	4195.7	4134.7	3091.8
57.5°	1438.4	1444.8	1583.4	2027.3	2647.9	3210.1	3716.3	3862.5	4287.3	4236.4	3227.9
60°	1129.4	1137.0	1237.5	1542.7	2143.0	2901.0	3624.7	3921.0	4466.6	4425.9	3465.7
62.5°	878.8	886.5	947.5	1126.8	1607.6	2425.4	3440.3	4015.1	4807.5	4788.4	3854.9
65°	680.4	683.0	724.9	808.9	1135.7	1910.3	3215.2	4102.9	5267.9	5251.4	4170.3
67.5°	502.4	506.2	535.4	587.6	766.9	1372.3	2846.3	4035.5	5615.1	5566.8	4284.8
69°	405.7	409.5	435.0	476.9	605.4	1081.0	2509.3	3868.9	5667.2	5621.5	4212.3
70°	347.2	349.8	375.2	410.8	516.4	918.3	2242.2	3725.2	5598.6	5554.0	4046.9
72.5°	222.6	235.3	260.7	283.6	342.1	607.9	1513.5	3089.3	4830.4	4754.1	3169.4
75°	123.4	127.2	173.0	200.9	227.7	395.5	841.9	1926.8	3072.7	3019.3	1695.3
77.5°	101.7	104.3	122.1	152.6	152.6	221.3	318.0	759.3	1168.8	1054.3	459.1
80°	71.2	73.8	92.8	100.5	109.4	124.6	103.0	166.6	180.6	160.2	68.7
82.5°	49.6	52.1	63.6	82.7	87.8	58.5	38.2	49.6	52.1	52.1	26.7
85°	8.9	12.7	47.1	68.7	52.1	17.8	21.6	17.8	16.5	17.8	6.4
87.5°	0.0	0.0	29.3	33.1	28.0	7.6	8.9	6.4	3.8	5.1	2.5
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°	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2
2.5°	552.0	525.3	479.5	446.4	418.4	396.8	387.9	373.9	363.7	368.8	362.5
5°	567.2	520.2	446.4	399.4	366.3	338.3	315.4	297.6	283.6	281.1	278.5
7.5°	591.4	524.0	427.3	368.8	319.2	276.0	240.4	213.7	193.3	193.3	185.7
10°	624.5	534.2	415.9	338.3	264.5	206.0	170.4	145.0	134.8	133.5	131.0
12.5°	670.3	553.2	407.0	298.9	206.0	150.1	128.5	119.6	115.7	114.5	113.2
15°	732.6	581.2	396.8	250.5	156.4	123.4	114.5	106.8	103.0	101.7	100.5
17.5°	792.3	606.7	375.2	200.9	127.2	111.9	101.7	95.4	90.3	89.0	89.0
20°	848.3	628.3	338.3	156.4	114.5	100.5	90.3	82.7	77.6	76.3	76.3
22.5°	906.8	646.1	292.5	127.2	104.3	89.0	78.9	71.2	66.1	64.9	63.6
25°	969.1	658.8	240.4	113.2	94.1	78.9	67.4	61.0	57.2	56.0	54.7
27.5°	1036.5	663.9	190.8	103.0	82.7	68.7	58.5	52.1	49.6	48.3	48.3
30°	1097.6	658.8	147.5	91.6	72.5	59.8	50.9	45.8	43.2	42.0	42.0
32.5°	1161.2	646.1	118.3	81.4	63.6	50.9	43.2	39.4	38.2	36.9	36.9
35°	1228.6	629.6	101.7	72.5	54.7	44.5	38.2	35.6	34.3	33.1	33.1
37.5°	1307.4	609.2	92.8	64.9	48.3	39.4	33.1	31.8	30.5	30.5	30.5
40°	1396.5	583.8	86.5	58.5	43.2	34.3	29.3	28.0	26.7	26.7	26.7
42.5°	1490.6	554.5	80.1	52.1	38.2	29.3	25.4	25.4	24.2	24.2	22.9
45°	1596.1	525.3	73.8	45.8	33.1	25.4	21.6	20.3	20.3	19.1	19.1
47.5°	1720.8	498.6	67.4	40.7	29.3	21.6	19.1	17.8	16.5	15.3	15.3
50°	1896.3	496.0	59.8	35.6	26.7	17.8	15.3	14.0	12.7	11.4	11.4
52.5°	2070.5	473.1	50.9	29.3	21.6	15.3	11.4	10.2	8.9	8.9	7.6
55°	2110.0	435.0	44.5	25.4	16.5	11.4	8.9	6.4	6.4	5.1	5.1
57.5°	2196.4	417.2	38.2	20.3	12.7	8.9	5.1	3.8	3.8	3.8	3.8
60°	2366.9	412.1	33.1	17.8	8.9	6.4	3.8	2.5	2.5	1.3	1.3
62.5°	2602.1	407.0	28.0	15.3	6.4	3.8	2.5	1.3	0.0	0.0	0.0
65°	2731.9	372.6	22.9	11.4	5.1	3.8	1.3	0.0	0.0	0.0	0.0
67.5°	2697.5	307.8	20.3	7.6	3.8	2.5	1.3	0.0	0.0	0.0	0.0
69°	2553.8	259.5	16.5	6.4	3.8	2.5	1.3	0.0	0.0	0.0	0.0
70°	2380.9	223.8	15.3	5.1	2.5	1.3	1.3	0.0	0.0	0.0	0.0
72.5°	1690.3	117.0	10.2	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0
75°	789.8	52.1	6.4	2.5	1.3	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	174.2	24.2	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	33.1	8.9	2.5	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.4	3.8	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	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)