

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: P398085

Luminaire Tested: **ARCH-S-PA1-80-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398085
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-PA1-80-827-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1050mA 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: 6200 lumens
Efficiency: N/A
Efficacy: 74.7 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

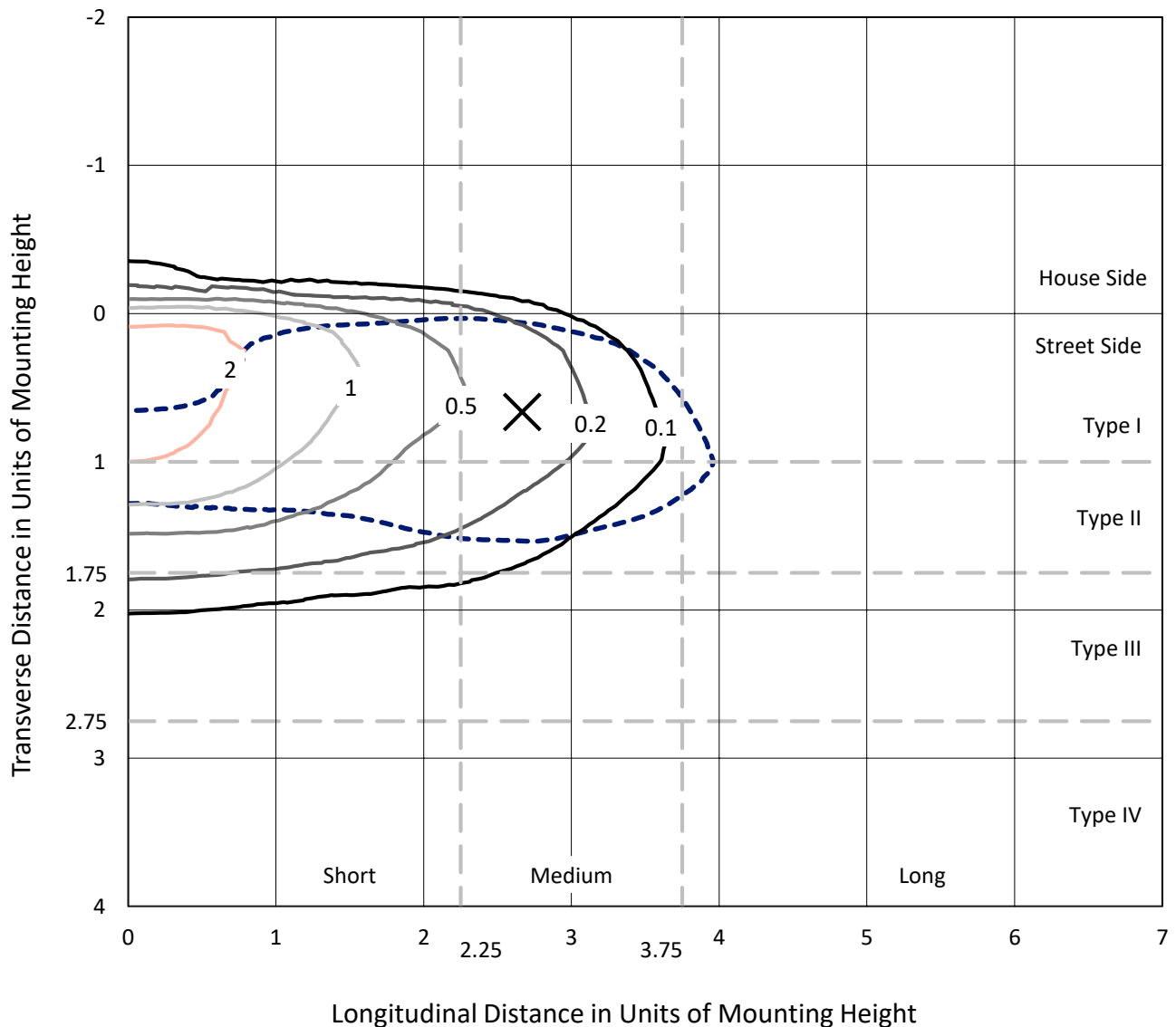
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

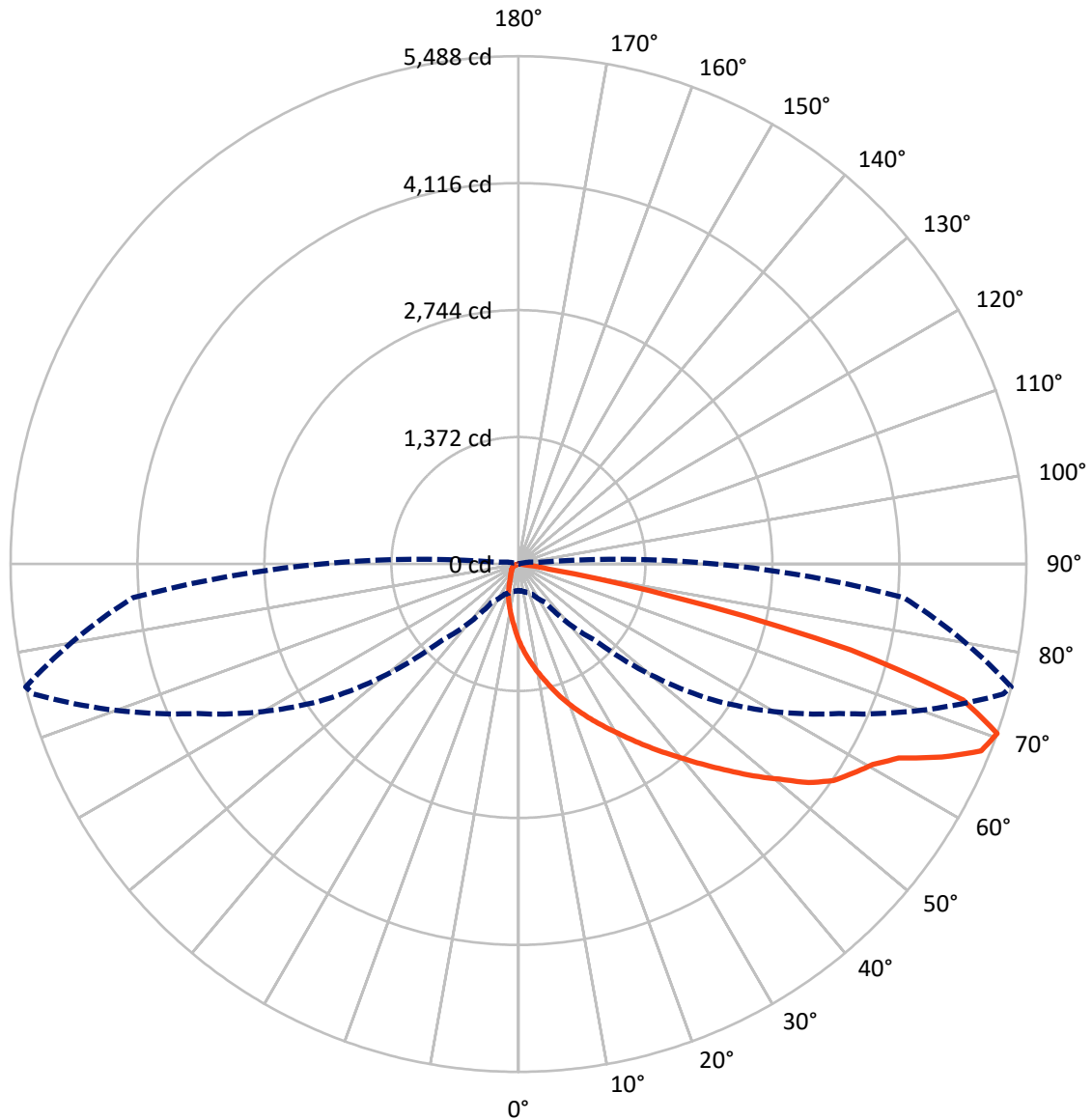
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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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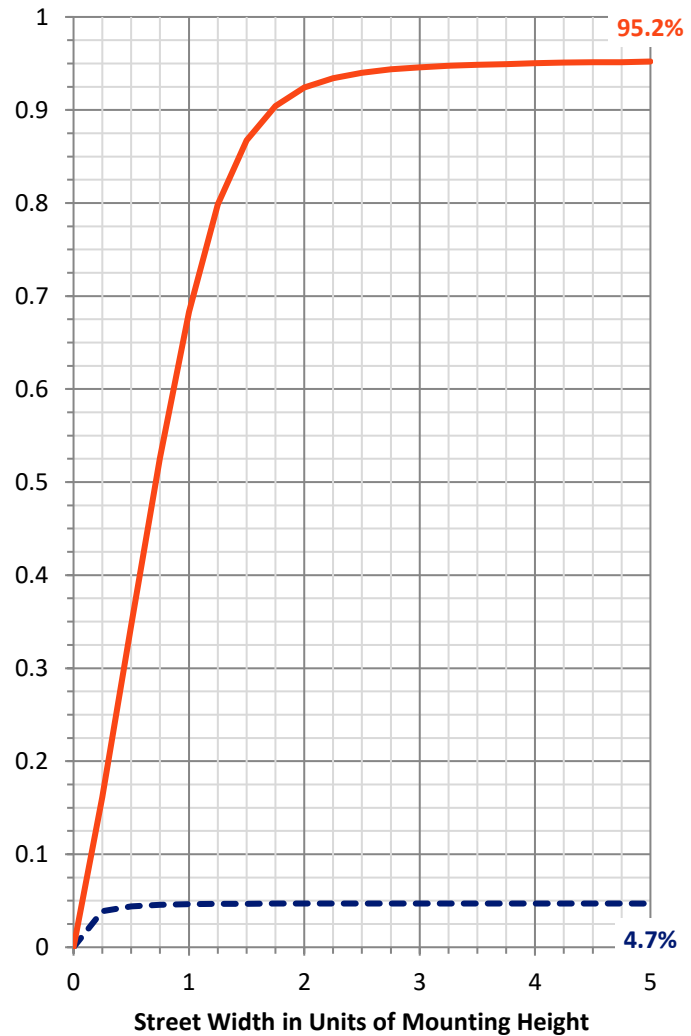
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	292.4	0.0	292.4
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	5907.6	0.0	5907.6
	% Fixture	95.3	0.0	95.3
Total	Lumens	6200.0	0.0	6200.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	1.3
10°-20°	252.3	4.1
20°-30°	469.9	7.6
30°-40°	831.2	13.4
40°-50°	1271.1	20.5
50°-60°	1441.2	23.2
60°-70°	1235.4	19.9
70°-80°	598.4	9.7
80°-90°	22.2	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°	6200.0	100.0
0°-180°	6200.0	100.0



--- HS — SS

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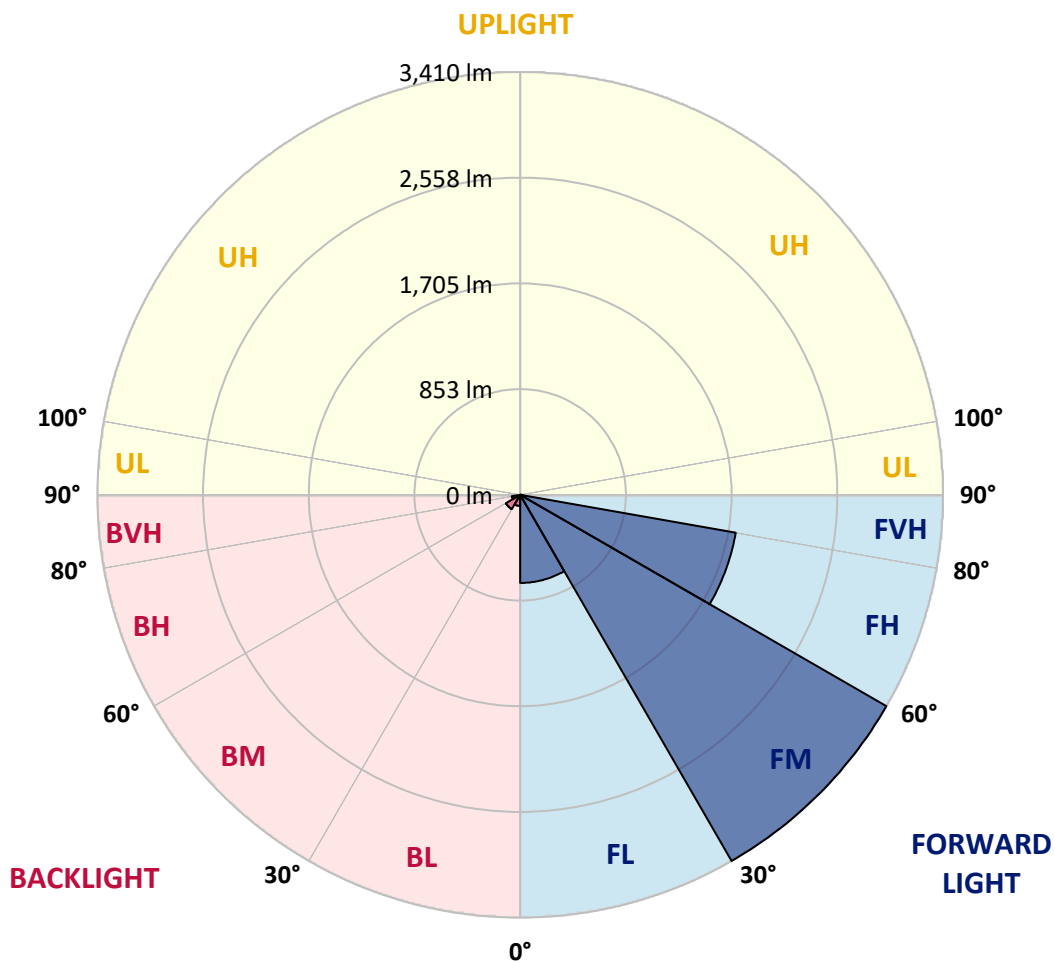
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	710.8	11.5			
FM (30°-60°)	3410.1	55.0			
FH (60°-80°)	1765.0	28.5			G1/1800
FVH (80°-90°)	21.8	0.4			G1/100
BL (0°-30°)	89.7	1.4	B0/110		
BM (30°-60°)	133.5	2.2	B0/220		
BH (60°-80°)	68.9	1.1	B0/110		G0/110
BVH (80°-90°)	0.4	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°	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9
2.5°	1134.4	1128.2	1122.0	1098.3	1076.6	1057.0	1019.8	971.3	928.0	918.7	868.1
5°	1332.6	1325.4	1316.1	1292.3	1264.5	1231.4	1176.7	1102.4	1026.0	1009.5	915.6
7.5°	1466.8	1460.6	1447.2	1435.8	1408.0	1376.0	1315.1	1228.3	1123.1	1102.4	970.3
10°	1558.7	1554.5	1552.5	1543.2	1522.5	1496.7	1435.8	1345.0	1221.1	1197.4	1028.1
12.5°	1591.7	1591.7	1602.0	1617.5	1620.6	1612.3	1556.6	1465.8	1324.3	1299.6	1096.2
15°	1547.3	1552.5	1575.2	1624.7	1676.3	1710.4	1675.3	1590.7	1437.9	1411.1	1176.7
17.5°	1534.9	1540.1	1555.6	1598.9	1668.1	1758.9	1776.5	1711.4	1545.2	1522.5	1259.3
20°	1570.0	1575.2	1588.6	1625.8	1678.4	1770.3	1843.6	1828.1	1658.8	1635.0	1342.9
22.5°	1653.6	1656.7	1656.7	1685.6	1732.1	1800.2	1885.9	1938.5	1775.4	1749.6	1425.5
25°	1833.2	1827.0	1802.3	1787.8	1817.8	1873.5	1939.6	2035.5	1905.5	1870.4	1514.3
27.5°	2068.6	2089.2	2029.4	1960.2	1937.5	1969.5	2014.9	2121.2	2031.4	1994.3	1594.8
30°	2387.5	2379.3	2300.8	2201.7	2103.7	2092.3	2107.8	2194.5	2157.4	2122.3	1684.6
32.5°	2649.7	2665.2	2582.6	2461.9	2315.3	2246.1	2229.6	2282.3	2291.5	2268.8	1790.9
35°	2919.1	2935.7	2855.1	2720.9	2546.5	2430.9	2383.4	2390.6	2457.7	2428.8	1902.4
37.5°	3160.7	3175.1	3095.6	2958.4	2783.9	2642.5	2574.4	2518.6	2618.8	2593.0	2020.1
40°	3344.4	3346.5	3292.8	3170.0	3004.8	2858.2	2780.8	2671.4	2789.1	2771.5	2142.9
42.5°	3474.5	3478.6	3439.4	3334.1	3181.3	3045.1	2982.1	2852.0	2985.2	2969.7	2285.3
45°	3535.4	3542.6	3538.5	3441.4	3314.5	3196.8	3176.2	3044.0	3199.9	3185.4	2449.5
47.5°	3477.6	3477.6	3530.2	3516.8	3400.2	3321.7	3345.4	3244.3	3433.2	3419.8	2616.7
50°	3237.1	3240.2	3347.5	3501.3	3433.2	3415.6	3490.0	3440.4	3644.8	3653.0	2816.9
52.5°	2605.3	2600.2	2962.5	3257.7	3410.5	3458.0	3623.1	3640.7	3898.7	3923.5	3016.2
55°	1946.8	1943.7	2290.5	2826.2	3251.5	3436.3	3697.4	3819.2	4115.5	4131.0	3164.8
57.5°	1541.1	1532.9	1723.8	2278.1	2892.3	3339.3	3700.5	3853.3	4236.3	4263.1	3309.3
60°	1185.0	1177.8	1320.2	1694.9	2383.4	3081.2	3611.8	3855.4	4352.9	4400.4	3503.4
62.5°	847.5	855.7	965.1	1216.0	1833.2	2716.8	3496.1	3884.3	4560.4	4614.1	3779.0
65°	571.9	567.7	658.6	827.8	1303.7	2226.5	3318.6	3945.2	4934.0	5028.0	4109.3
67.5°	397.4	400.5	441.8	538.8	827.8	1709.4	3023.4	3979.2	5320.1	5393.4	4340.5
70°	287.0	291.1	313.8	362.3	505.8	1159.2	2555.8	3823.4	5424.3	5488.3	4179.5
72.5°	188.9	197.2	231.2	257.0	323.1	725.7	1882.8	3293.8	4975.3	5022.8	3506.5
75°	102.2	104.3	148.6	192.0	230.2	452.1	1123.1	2221.4	3722.2	3706.7	2312.2
77.5°	79.5	82.6	91.9	137.3	154.8	248.8	443.9	1003.3	1763.0	1715.6	788.6
80°	48.5	50.6	64.0	81.5	108.4	144.5	130.1	272.5	358.2	335.5	115.6
82.5°	28.9	31.0	38.2	68.1	85.7	68.1	45.4	66.1	67.1	66.1	28.9
85°	5.2	5.2	26.8	47.5	45.4	19.6	26.8	21.7	19.6	20.6	6.2
87.5°	0.0	0.0	10.3	14.5	20.6	7.2	10.3	5.2	5.2	5.2	3.1
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°	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9
2.5°	837.1	802.0	729.8	666.8	603.9	557.4	522.3	486.2	473.8	458.3	450.1
5°	851.6	782.4	638.9	524.4	427.3	353.0	305.5	276.6	258.1	244.6	241.5
7.5°	873.3	766.9	565.7	410.8	304.5	230.2	191.0	171.3	161.0	154.8	152.8
10°	899.1	753.5	493.4	320.0	214.7	162.1	140.4	132.1	128.0	125.9	124.9
12.5°	935.2	748.4	432.5	246.7	162.1	133.2	121.8	116.6	113.5	110.4	109.4
15°	982.7	750.4	376.8	191.0	134.2	118.7	109.4	104.3	100.1	97.0	97.0
17.5°	1032.2	753.5	322.1	154.8	121.8	108.4	98.1	90.8	87.7	84.6	83.6
20°	1078.7	752.5	269.4	132.1	110.4	97.0	86.7	79.5	74.3	71.2	71.2
22.5°	1123.1	746.3	219.9	118.7	101.2	85.7	74.3	67.1	63.0	59.9	59.9
25°	1170.5	733.9	179.6	108.4	89.8	75.4	64.0	56.8	53.7	50.6	50.6
27.5°	1207.7	713.3	146.6	99.1	79.5	65.0	54.7	48.5	45.4	43.4	43.4
30°	1248.0	683.3	121.8	88.8	69.2	55.7	46.5	41.3	38.2	37.2	37.2
32.5°	1292.3	650.3	104.3	78.4	58.8	47.5	39.2	36.1	33.0	32.0	32.0
35°	1344.0	621.4	93.9	68.1	51.6	40.3	34.1	31.0	28.9	28.9	28.9
37.5°	1402.8	591.5	84.6	59.9	44.4	34.1	28.9	27.9	26.8	25.8	25.8
40°	1466.8	559.5	76.4	52.6	38.2	28.9	24.8	24.8	23.7	23.7	23.7
42.5°	1539.0	531.6	69.2	46.5	33.0	24.8	21.7	21.7	20.6	20.6	20.6
45°	1617.5	505.8	63.0	41.3	28.9	21.7	19.6	18.6	17.5	17.5	17.5
47.5°	1710.4	491.3	57.8	36.1	24.8	18.6	16.5	15.5	14.5	13.4	13.4
50°	1829.1	497.5	52.6	29.9	21.7	15.5	13.4	12.4	11.4	10.3	10.3
52.5°	1923.0	494.4	45.4	25.8	17.5	12.4	10.3	9.3	8.3	7.2	7.2
55°	1991.2	482.0	39.2	21.7	13.4	10.3	8.3	6.2	5.2	5.2	5.2
57.5°	2058.3	469.7	33.0	17.5	10.3	7.2	5.2	4.1	4.1	4.1	4.1
60°	2162.5	452.1	28.9	14.5	8.3	5.2	3.1	3.1	2.1	2.1	2.1
62.5°	2289.5	430.4	23.7	12.4	6.2	4.1	2.1	2.1	0.0	0.0	0.0
65°	2428.8	392.2	19.6	9.3	5.2	3.1	2.1	0.0	0.0	0.0	0.0
67.5°	2396.8	314.8	16.5	6.2	4.1	2.1	1.0	0.0	0.0	0.0	0.0
70°	2120.2	212.6	13.4	5.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0
72.5°	1660.9	125.9	9.3	4.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0
75°	1063.2	63.0	6.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	356.1	31.0	4.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	50.6	10.3	2.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.4	4.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	1.0	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)