

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: P840857

Luminaire Tested: **ARCH4-100-722-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-722-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10688 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

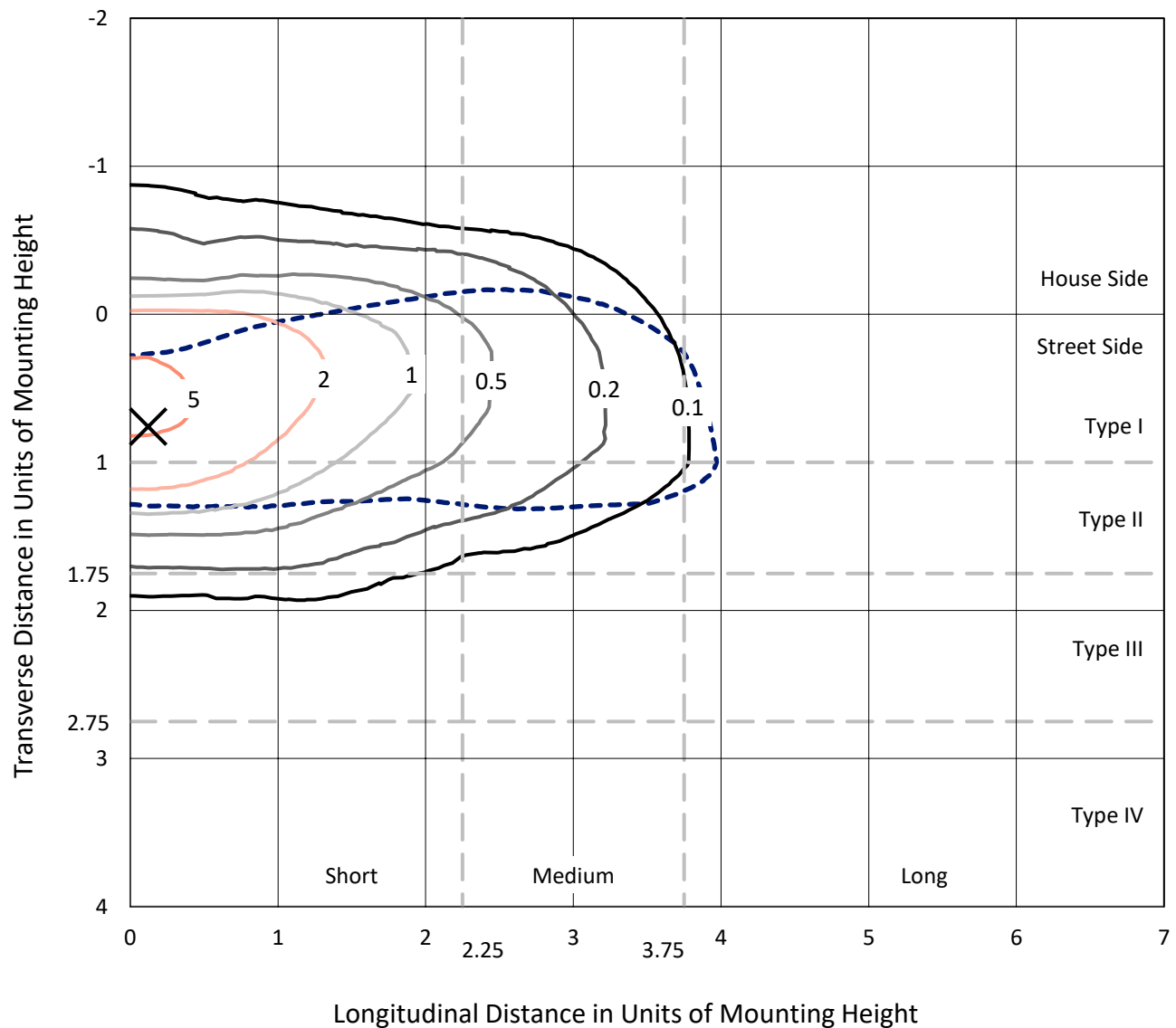
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P840857
CATALOG NUMBER: ARCH4-100-722-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

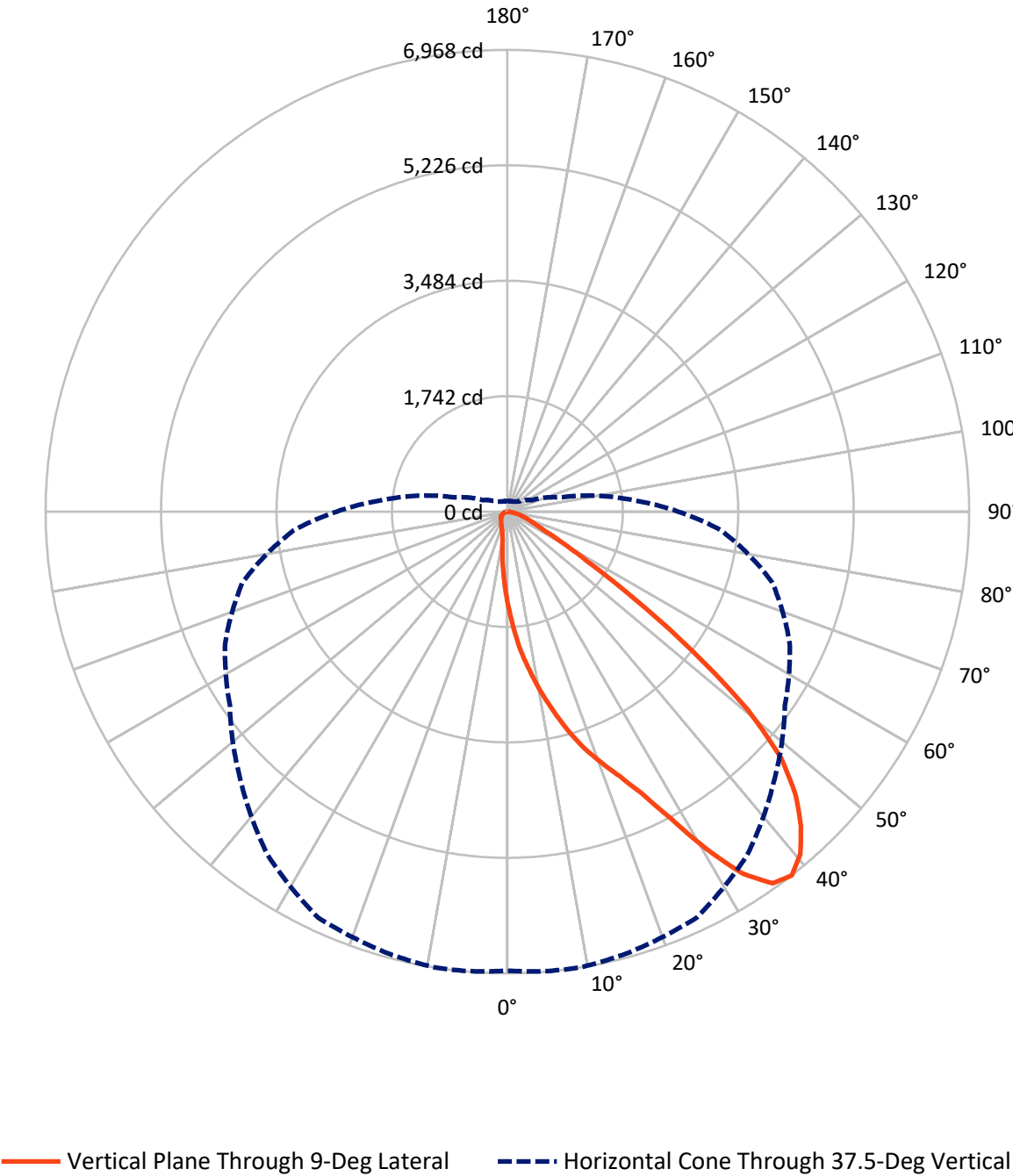
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
Type II - Short - N/A

REPORT NUMBER: P840857
CATALOG NUMBER: ARCH4-100-722-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P840857

CATALOG NUMBER: ARCH4-100-722-U-T2R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1299.9	0.0	1299.9
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	9388.1	0.0	9388.1
	% Fixture	87.8	0.0	87.8
Total	Lumens	10688.0	0.0	10688.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	1.3
10°-20°	493.6	4.6
20°-30°	1014.2	9.5
30°-40°	1792.7	16.8
40°-50°	2381.4	22.3
50°-60°	2258.6	21.1
60°-70°	1723.1	16.1
70°-80°	835.4	7.8
80°-90°	47.0	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°	10688.0	100.0
0°-180°	10688.0	100.0

Coefficient of Utilization



REPORT NUMBER: P840857

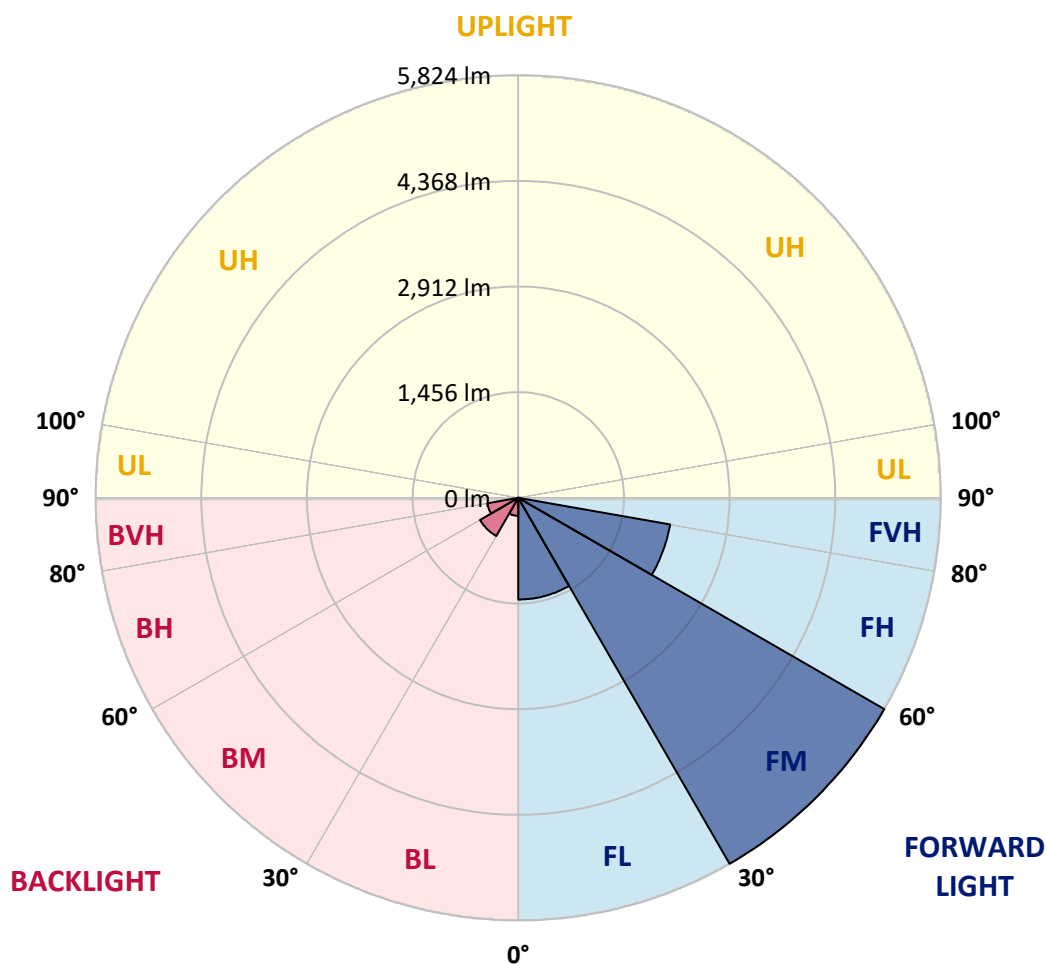
CATALOG NUMBER: ARCH4-100-722-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1401.7	13.1			
FM	(30°-60°)	5824.4	54.5			
FH	(60°-80°)	2124.7	19.9			G2/5000
FVH	(80°-90°)	37.2	0.3			G1/100
BL	(0°-30°)	248.1	2.3	B1/500		
BM	(30°-60°)	608.2	5.7	B1/1000		
BH	(60°-80°)	433.8	4.1	B1/500		G1/500
BVH	(80°-90°)	9.8	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



REPORT NUMBER: P840857

CATALOG NUMBER: ARCH4-100-722-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8
2.5°	1750.7	1720.0	1755.1	1750.7	1720.0	1700.2	1638.8	1619.0	1546.6	1494.0	1447.9
5°	2110.5	2079.7	2110.5	2101.7	2057.8	2009.5	1908.6	1842.8	1713.4	1599.3	1496.2
7.5°	2408.8	2408.8	2422.0	2424.2	2371.5	2296.9	2171.9	2073.2	1891.1	1715.6	1551.0
10°	2731.3	2733.5	2762.0	2742.3	2672.1	2571.2	2413.2	2288.2	2068.8	1838.4	1603.7
12.5°	3075.7	3077.9	3086.7	3077.9	2994.6	2865.1	2674.3	2509.7	2257.4	1978.8	1676.1
15°	3420.2	3422.4	3433.3	3418.0	3325.8	3174.5	2957.3	2755.4	2457.1	2136.8	1763.8
17.5°	3742.7	3747.1	3755.8	3736.1	3639.6	3459.7	3238.1	2994.6	2669.9	2305.7	1862.6
20°	4032.3	4036.6	4043.2	4016.9	3920.4	3740.5	3501.3	3246.9	2887.1	2479.0	1970.1
22.5°	4324.0	4328.4	4339.4	4304.3	4196.8	3990.6	3755.8	3492.6	3117.4	2669.9	2095.1
25°	4697.0	4701.4	4710.1	4659.7	4512.7	4271.4	4023.5	3753.6	3367.5	2884.9	2248.7
27.5°	5243.2	5238.9	5238.9	5146.7	4894.4	4580.7	4293.3	4019.1	3637.4	3115.2	2417.6
30°	5918.9	5908.0	5901.4	5776.3	5416.6	4929.5	4569.7	4267.0	3896.2	3358.7	2599.7
32.5°	6524.4	6524.4	6511.3	6379.6	5997.9	5399.0	4863.7	4508.3	4146.3	3604.5	2788.4
35°	6882.0	6897.4	6890.8	6792.1	6513.5	5903.6	5260.8	4797.9	4409.6	3861.1	3014.3
37.5°	6930.3	6961.0	6967.6	6908.4	6761.4	6316.0	5701.8	5111.6	4699.2	4137.6	3233.7
40°	6735.0	6800.9	6800.9	6792.1	6739.4	6511.3	6072.5	5475.8	4997.5	4424.9	3455.3
42.5°	6434.5	6502.5	6493.7	6526.6	6513.5	6465.2	6280.9	5815.8	5295.9	4721.1	3657.1
45°	6041.8	6112.0	6094.5	6153.7	6180.0	6232.7	6259.0	6052.8	5589.9	5043.6	3883.1
47.5°	5412.2	5530.6	5557.0	5662.3	5772.0	5936.5	6061.5	6138.3	5864.1	5390.2	4128.8
50°	4482.0	4648.7	4701.4	4922.9	5223.5	5563.5	5765.4	6033.0	6057.2	5745.6	4394.2
52.5°	3209.6	3402.6	3483.8	3848.0	4466.6	5059.0	5423.1	5800.5	6131.7	6085.7	4681.6
55°	2075.4	2239.9	2318.9	2661.1	3483.8	4414.0	5019.5	5499.9	6090.1	6397.2	5010.7
57.5°	1279.0	1373.3	1426.0	1720.0	2476.8	3586.9	4490.8	5223.5	5962.8	6667.0	5352.9
60°	862.2	917.0	943.3	1081.6	1682.7	2680.9	3764.6	4933.9	5796.1	6849.1	5664.5
62.5°	572.6	590.1	616.5	702.0	1110.1	1882.3	2891.5	4416.2	5671.0	6860.1	5894.8
65°	443.2	451.9	462.9	500.2	684.5	1316.3	2033.7	3578.1	5484.6	6627.5	5967.2
67.5°	348.8	357.6	370.8	390.5	495.8	892.9	1384.3	2621.6	5102.8	6263.4	5848.7
70°	274.2	280.8	289.6	307.1	386.1	647.2	914.8	1741.9	4332.8	5916.8	5475.8
72.5°	217.2	223.8	232.5	250.1	313.7	473.9	627.4	1085.9	3341.2	5493.3	4758.4
75°	171.1	175.5	182.1	199.6	252.3	368.6	425.6	649.4	2270.6	4718.9	3707.6
77.5°	85.6	105.3	120.7	138.2	184.3	254.5	283.0	359.8	958.7	2422.0	1768.2
80°	50.5	61.4	65.8	76.8	120.7	153.6	153.6	144.8	302.7	930.2	721.8
82.5°	28.5	39.5	41.7	43.9	72.4	87.8	70.2	52.7	61.4	311.5	210.6
85°	8.8	13.2	15.4	17.6	24.1	26.3	24.1	21.9	17.6	30.7	19.7
87.5°	0.0	0.0	0.0	0.0	2.2	4.4	4.4	4.4	6.6	6.6	6.6
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: P840857

CATALOG NUMBER: ARCH4-100-722-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8	1412.8
2.5°	1421.6	1393.1	1338.2	1287.8	1239.5	1204.4	1171.5	1140.8	1118.9	1101.3	1099.1
5°	1441.3	1384.3	1279.0	1180.3	1090.3	1015.7	952.1	901.7	864.4	838.0	835.8
7.5°	1467.7	1379.9	1219.8	1072.8	939.0	831.5	739.3	671.3	623.0	603.3	587.9
10°	1489.6	1375.5	1160.5	965.3	789.8	653.8	544.1	476.1	441.0	427.8	421.2
12.5°	1526.9	1379.9	1110.1	866.6	660.3	500.2	416.8	379.5	364.2	353.2	351.0
15°	1581.7	1399.7	1061.8	770.0	528.7	403.7	355.4	331.3	315.9	313.7	311.5
17.5°	1636.6	1417.2	1017.9	671.3	438.8	351.0	318.1	298.4	287.4	285.2	285.2
20°	1700.2	1439.2	969.7	577.0	375.1	315.9	289.6	274.2	261.1	258.9	258.9
22.5°	1774.8	1469.9	923.6	493.6	333.5	289.6	267.6	250.1	239.1	236.9	236.9
25°	1875.7	1515.9	886.3	432.2	304.9	267.6	247.9	232.5	223.8	219.4	219.4
27.5°	1987.6	1579.6	860.0	394.9	285.2	250.1	230.4	217.2	208.4	204.0	204.0
30°	2112.7	1649.8	842.4	379.5	274.2	234.7	217.2	204.0	193.1	190.9	190.9
32.5°	2250.9	1730.9	831.5	381.7	272.0	223.8	204.0	190.9	182.1	177.7	177.7
35°	2404.4	1820.9	824.9	394.9	276.4	215.0	193.1	179.9	171.1	166.7	166.7
37.5°	2575.6	1926.2	824.9	408.1	287.4	212.8	182.1	168.9	162.3	158.0	158.0
40°	2735.7	2038.1	833.7	423.4	298.4	212.8	173.3	162.3	153.6	149.2	149.2
42.5°	2860.7	2101.7	840.2	438.8	304.9	210.6	164.5	153.6	147.0	142.6	142.6
45°	3003.3	2169.7	827.1	445.3	304.9	206.2	158.0	147.0	140.4	136.0	136.0
47.5°	3161.3	2253.1	824.9	449.7	298.4	197.4	151.4	140.4	136.0	131.6	131.6
50°	3321.5	2345.2	829.3	447.5	289.6	184.3	142.6	136.0	129.4	125.0	125.0
52.5°	3503.5	2441.7	838.0	443.2	269.8	168.9	136.0	129.4	122.9	118.5	116.3
55°	3705.4	2547.0	855.6	434.4	243.5	153.6	129.4	122.9	114.1	109.7	107.5
57.5°	3937.9	2676.5	875.3	416.8	215.0	140.4	122.9	114.1	100.9	94.3	92.1
60°	4159.5	2823.5	897.3	375.1	186.5	127.2	116.3	103.1	89.9	85.6	83.4
62.5°	4367.9	2968.2	908.2	300.6	158.0	116.3	109.7	94.3	81.2	76.8	74.6
65°	4501.7	3126.2	884.1	204.0	129.4	107.5	100.9	87.8	74.6	68.0	68.0
67.5°	4510.5	3200.8	800.7	133.8	105.3	96.5	92.1	79.0	65.8	61.4	59.2
70°	4288.9	3088.9	612.1	105.3	87.8	83.4	83.4	70.2	57.0	52.7	50.5
72.5°	3780.0	2735.7	390.5	85.6	74.6	70.2	70.2	59.2	50.5	43.9	41.7
75°	2983.6	2110.5	208.4	70.2	61.4	59.2	54.8	48.3	41.7	37.3	35.1
77.5°	1371.1	930.2	96.5	50.5	46.1	46.1	41.7	35.1	32.9	28.5	28.5
80°	541.9	315.9	48.3	32.9	30.7	30.7	30.7	24.1	24.1	19.7	17.6
82.5°	149.2	65.8	24.1	19.7	19.7	19.7	17.6	15.4	15.4	13.2	13.2
85°	15.4	11.0	11.0	11.0	11.0	8.8	8.8	6.6	4.4	4.4	4.4
87.5°	6.6	6.6	6.6	6.6	6.6	4.4	2.2	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)