

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: P265621

Luminaire Tested: **ARCH-L-AF72-140-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265621
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-140-D-U-T3-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16433.9 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

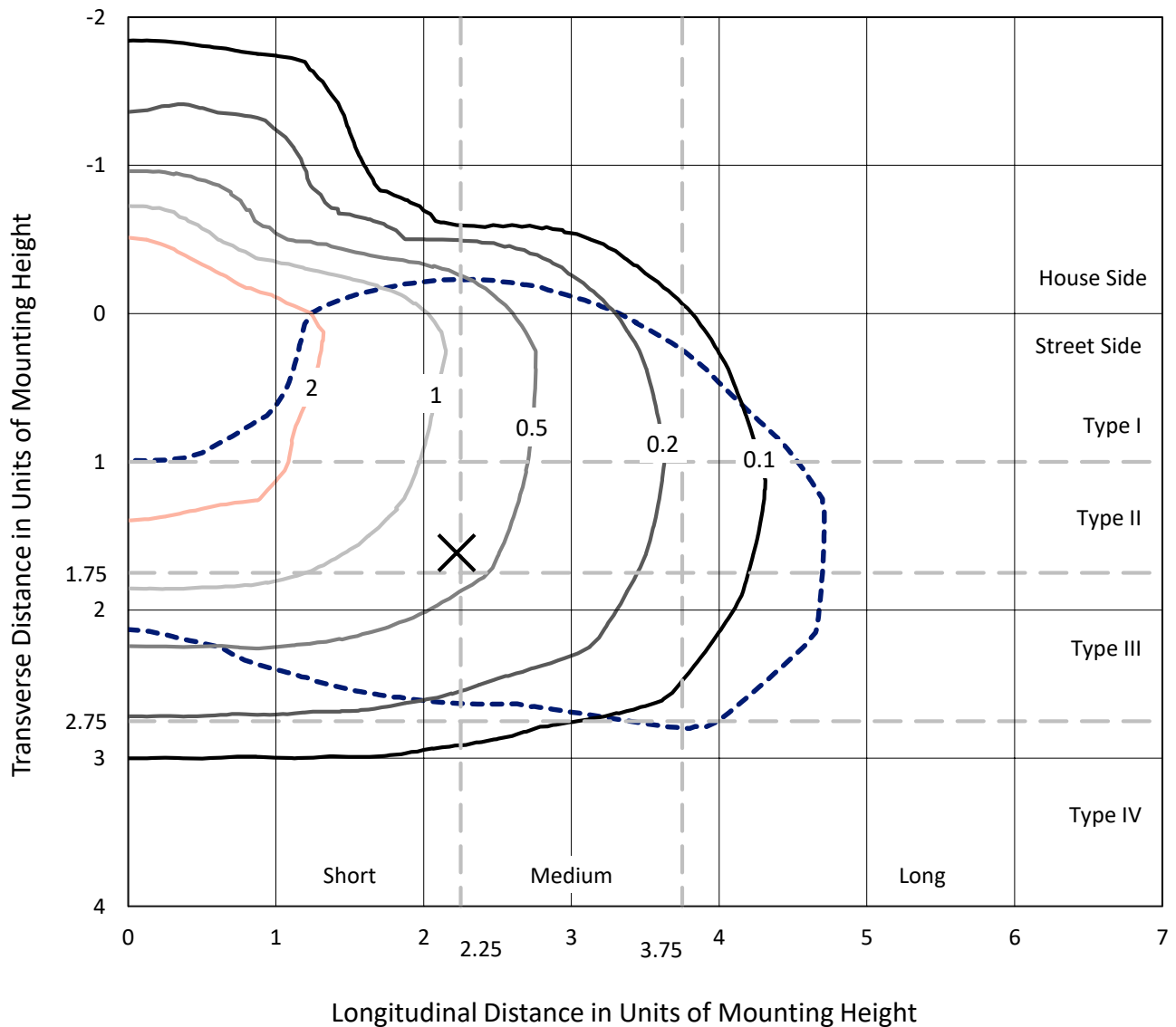
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

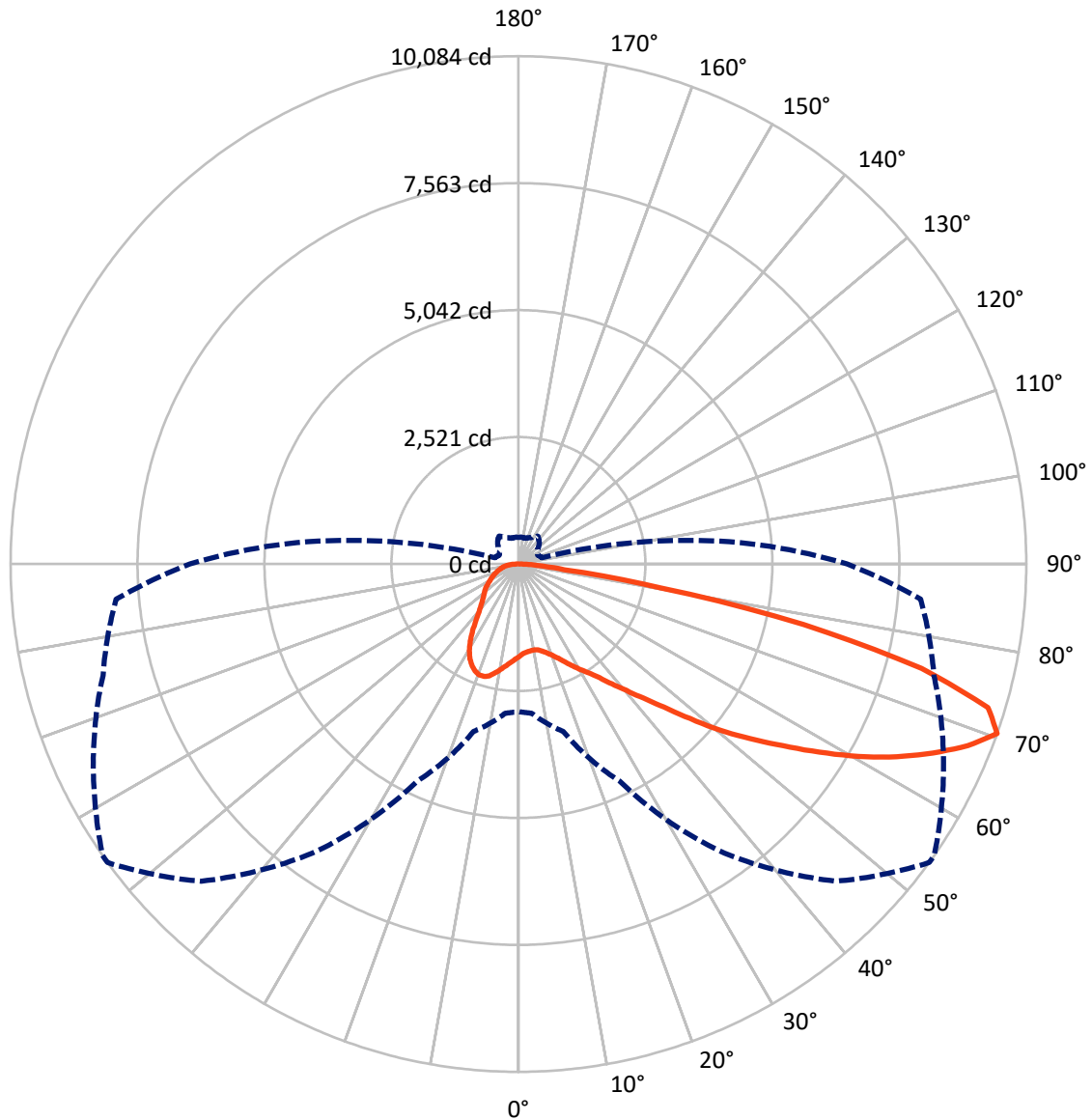
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3727.2	0.0	3727.2
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	12706.8	0.0	12706.8
	% Fixture	77.3	0.0	77.3
Total	Lumens	16433.9	0.0	16433.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.4	1.1
10°-20°	576.5	3.5
20°-30°	1001.7	6.1
30°-40°	1463.8	8.9
40°-50°	2297.4	14.0
50°-60°	3532.9	21.5
60°-70°	4316.3	26.3
70°-80°	2676.1	16.3
80°-90°	388.8	2.4
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°	16433.9	100.0
0°-180°	16433.9	100.0

Coefficient of Utilization



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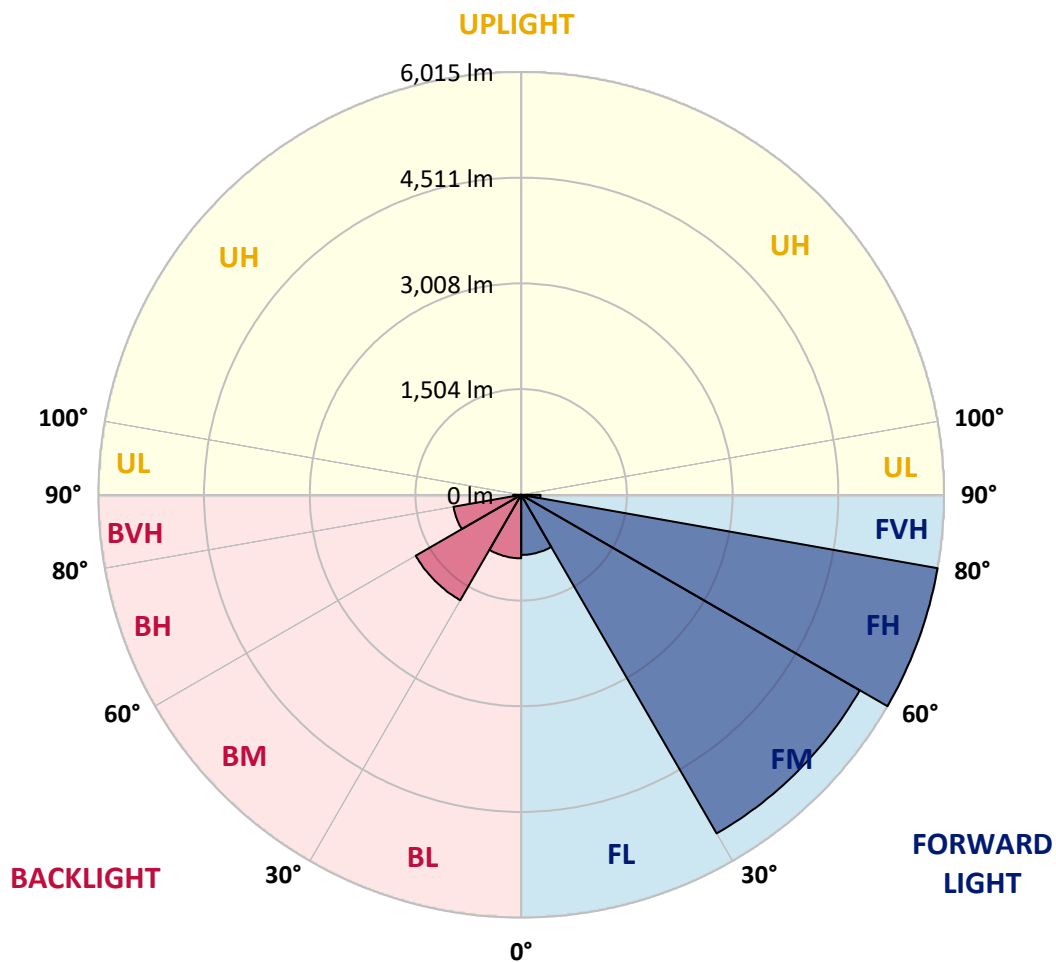
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	855.1	5.2			
FM	(30°-60°)	5562.1	33.8			
FH	(60°-80°)	6015.1	36.6			G3/7500
FVH	(80°-90°)	274.5	1.7			G3/500
BL	(0°-30°)	903.6	5.5	B2/1000		
BM	(30°-60°)	1732.0	10.5	B2/2500		
BH	(60°-80°)	977.4	5.9	B2/1000		G2/1000
BVH	(80°-90°)	114.3	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7
2.5°	1766.3	1760.4	1760.4	1769.4	1772.4	1781.5	1781.5	1784.5	1793.5	1808.6	1826.7
5°	1712.2	1709.2	1712.2	1724.2	1730.2	1748.3	1754.4	1757.4	1775.4	1799.6	1826.7
7.5°	1658.1	1655.0	1661.1	1679.1	1697.2	1724.2	1739.3	1742.4	1769.4	1802.4	1838.7
10°	1640.0	1637.0	1646.1	1661.1	1679.1	1709.2	1733.3	1736.3	1775.4	1814.5	1865.7
12.5°	1664.1	1661.1	1670.0	1685.2	1703.1	1724.2	1751.3	1754.4	1805.6	1856.6	1910.9
15°	1724.2	1724.2	1727.4	1736.3	1754.4	1772.4	1796.5	1799.6	1853.7	1913.8	1968.0
17.5°	1817.6	1811.5	1811.5	1808.6	1820.5	1829.6	1859.8	1862.6	1919.9	1974.0	2028.3
20°	1932.0	1928.9	1916.9	1901.8	1898.7	1904.9	1934.9	1938.0	1995.0	2040.2	2091.4
22.5°	2070.4	2073.4	2046.2	2013.1	1998.1	2007.2	2034.2	2037.3	2079.3	2118.6	2163.6
25°	2253.8	2244.9	2205.8	2157.5	2127.5	2127.5	2154.6	2154.6	2193.8	2217.7	2247.9
27.5°	2428.4	2410.4	2374.3	2305.1	2256.9	2266.0	2293.1	2293.1	2329.1	2338.2	2353.2
30°	2618.0	2600.0	2554.8	2467.6	2404.4	2398.4	2431.4	2428.4	2476.5	2473.6	2461.5
32.5°	2849.8	2840.7	2765.4	2654.1	2569.8	2548.9	2578.9	2581.9	2612.0	2603.0	2563.9
35°	3174.7	3171.6	3102.4	2906.8	2795.5	2756.4	2774.4	2774.4	2795.5	2771.5	2705.2
37.5°	3584.0	3589.9	3529.8	3240.9	3084.4	3018.2	3021.2	3018.2	3024.2	2997.1	2927.9
40°	3993.2	4008.2	4005.3	3656.2	3457.5	3343.2	3301.1	3295.2	3310.2	3298.0	3231.9
42.5°	4531.9	4568.1	4483.7	4167.7	3945.0	3752.5	3638.1	3623.0	3656.2	3671.3	3608.0
45°	5091.6	5079.6	4947.1	4718.4	4516.8	4270.1	4053.4	4029.3	4053.4	4098.5	4032.3
47.5°	5383.5	5374.4	5341.3	5227.0	5197.0	4914.0	4586.0	4564.9	4519.8	4583.1	4504.8
50°	5864.9	5873.9	5738.6	5726.5	5852.8	5696.4	5187.9	5139.7	5058.4	5109.6	5043.4
52.5°	6214.0	6174.9	6090.6	6196.0	6590.1	6506.0	5753.6	5732.5	5657.3	5645.3	5615.1
55°	6355.5	6355.5	6370.5	6614.2	7177.0	7065.6	6367.5	6388.6	6286.2	6202.0	6241.1
57.5°	6397.5	6415.6	6545.1	6948.3	7866.1	7501.9	7044.6	7074.6	6927.2	6758.7	6882.1
60°	6190.0	6244.1	6554.0	7137.8	8254.3	7965.5	7757.8	7766.7	7553.0	7306.4	7523.0
62.5°	5657.3	5723.6	6277.1	7216.1	8191.0	8440.8	8431.9	8452.8	8160.9	7854.1	8124.9
65°	5004.3	5070.6	5660.3	6996.4	8142.9	8780.8	9048.6	9105.8	8729.6	8317.4	8501.0
67.5°	4044.3	4131.7	4691.4	6256.2	7908.1	9060.8	9626.4	9686.7	9169.0	8558.2	8468.0
70°	2931.0	2973.1	3442.6	4754.5	6951.3	8907.2	10083.8	10080.8	9313.4	8540.1	8016.6
72.5°	1411.2	1444.5	1850.7	2952.0	4971.2	7559.1	9752.8	9810.0	9114.9	8278.3	6984.3
75°	580.8	613.9	749.2	1245.8	2608.9	4995.3	8266.4	8401.7	8278.3	7429.7	5464.7
77.5°	361.1	373.2	439.4	643.9	1191.6	2332.1	5786.7	5970.2	6560.1	5952.2	3608.0
80°	270.7	279.8	328.1	451.4	752.3	860.7	2873.8	3105.5	3975.2	3415.4	1633.9
82.5°	225.7	228.7	261.8	328.1	511.6	493.4	920.9	1026.1	1853.7	1303.0	562.7
85°	210.7	216.8	234.6	234.6	324.9	309.9	382.1	400.3	538.7	445.4	195.7
87.5°	108.3	102.2	207.7	183.6	168.5	150.5	162.6	174.5	201.6	213.6	87.2
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°	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7	1838.7
2.5°	1832.6	1841.6	1856.6	1871.7	1889.8	1910.9	1922.9	1938.0	1950.0	1943.9	1941.0
5°	1841.6	1856.6	1889.8	1919.9	1956.0	1998.1	2025.1	2055.3	2079.3	2085.3	2076.3
7.5°	1856.6	1883.7	1928.9	1983.1	2031.2	2085.3	2127.5	2169.6	2199.7	2205.8	2205.8
10°	1892.8	1922.9	1983.1	2055.3	2112.5	2169.6	2217.7	2251.0	2277.9	2290.0	2290.0
12.5°	1943.9	1980.0	2052.3	2139.6	2202.7	2256.9	2284.0	2299.0	2311.1	2323.0	2326.2
15°	2004.1	2043.3	2130.5	2223.8	2290.0	2317.1	2317.1	2314.0	2314.0	2320.1	2326.2
17.5°	2064.3	2106.4	2196.7	2296.0	2338.2	2323.0	2302.0	2293.1	2286.9	2284.0	2293.1
20°	2127.5	2169.6	2260.0	2353.2	2341.2	2277.9	2247.9	2226.8	2208.8	2199.7	2211.7
22.5°	2196.7	2235.8	2329.1	2392.4	2302.0	2205.8	2148.6	2115.5	2085.3	2067.3	2079.3
25°	2277.9	2317.1	2407.4	2404.4	2232.8	2097.5	2007.2	1952.9	1919.9	1901.8	1901.8
27.5°	2374.3	2407.4	2494.7	2374.3	2136.4	1952.9	1820.5	1769.4	1760.4	1745.3	1745.3
30°	2473.6	2500.6	2575.9	2305.1	2004.1	1763.5	1618.9	1594.9	1597.8	1582.9	1585.9
32.5°	2575.9	2603.0	2623.9	2202.7	1832.6	1549.8	1453.5	1435.4	1432.3	1420.3	1408.4
35°	2720.2	2759.5	2630.1	2064.3	1624.9	1372.3	1303.0	1284.9	1266.9	1224.7	1224.7
37.5°	2940.1	2982.2	2615.0	1892.8	1411.2	1233.8	1170.6	1146.4	1116.5	1074.4	1059.2
40°	3240.9	3240.9	2581.9	1700.2	1239.8	1122.4	1062.2	1032.2	999.0	957.0	947.9
42.5°	3595.9	3511.7	2530.7	1504.7	1113.4	1047.2	993.0	959.8	920.9	872.7	866.7
45°	4011.3	3782.6	2458.5	1330.1	1020.1	1002.1	968.9	911.8	845.6	794.5	785.4
47.5°	4414.5	4026.4	2389.3	1206.8	942.0	984.1	957.0	860.7	770.3	698.2	689.1
50°	4856.9	4243.0	2308.0	1104.3	881.6	972.0	942.0	785.4	686.0	634.9	629.0
52.5°	5299.2	4462.7	2220.8	996.0	830.6	947.9	905.9	731.2	683.2	613.9	604.9
55°	5765.6	4718.4	2118.6	875.7	770.3	899.7	857.6	728.3	704.1	613.9	592.8
57.5°	6220.0	5001.4	1952.9	758.3	704.1	827.5	839.6	710.2	659.0	607.9	583.8
60°	6722.6	5302.2	1679.1	659.0	647.0	767.3	815.5	671.0	607.9	589.7	577.8
62.5°	7125.7	5573.1	1312.1	589.7	598.8	719.3	785.4	647.0	586.9	571.7	568.7
65°	7300.3	5579.1	942.0	529.6	550.8	674.1	755.4	625.8	568.7	562.7	559.7
67.5°	7116.7	5272.2	662.1	472.5	499.5	632.0	716.2	604.9	550.8	553.6	547.6
70°	6524.0	4625.2	484.5	418.3	451.4	586.9	674.1	577.8	529.6	535.6	526.5
72.5°	5458.7	3605.0	388.2	373.2	412.2	538.7	632.0	547.6	496.6	499.5	481.5
75°	4032.3	2389.3	324.9	334.0	367.0	493.4	577.8	508.6	460.4	448.3	436.3
77.5°	2398.4	1227.8	267.9	291.9	328.1	439.4	517.6	460.4	421.2	400.3	391.2
80°	990.0	496.6	219.6	246.8	285.9	391.2	457.3	403.2	376.1	355.1	343.1
82.5°	394.1	243.7	174.5	201.6	240.7	340.1	400.3	355.1	328.1	313.0	279.8
85°	150.5	120.4	117.4	141.5	180.6	261.8	331.0	297.9	276.9	237.7	228.7
87.5°	60.1	54.2	54.2	69.2	102.2	165.5	237.7	207.7	216.8	171.5	174.5
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)