

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: McGRAW-EDISON

Report Number: P299715

Luminaire Tested: **GLNA-AF-04-LED-E1-SL2-8030-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299715
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-04-LED-E1-SL2-8030-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9712.1 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 129
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: 25 FT



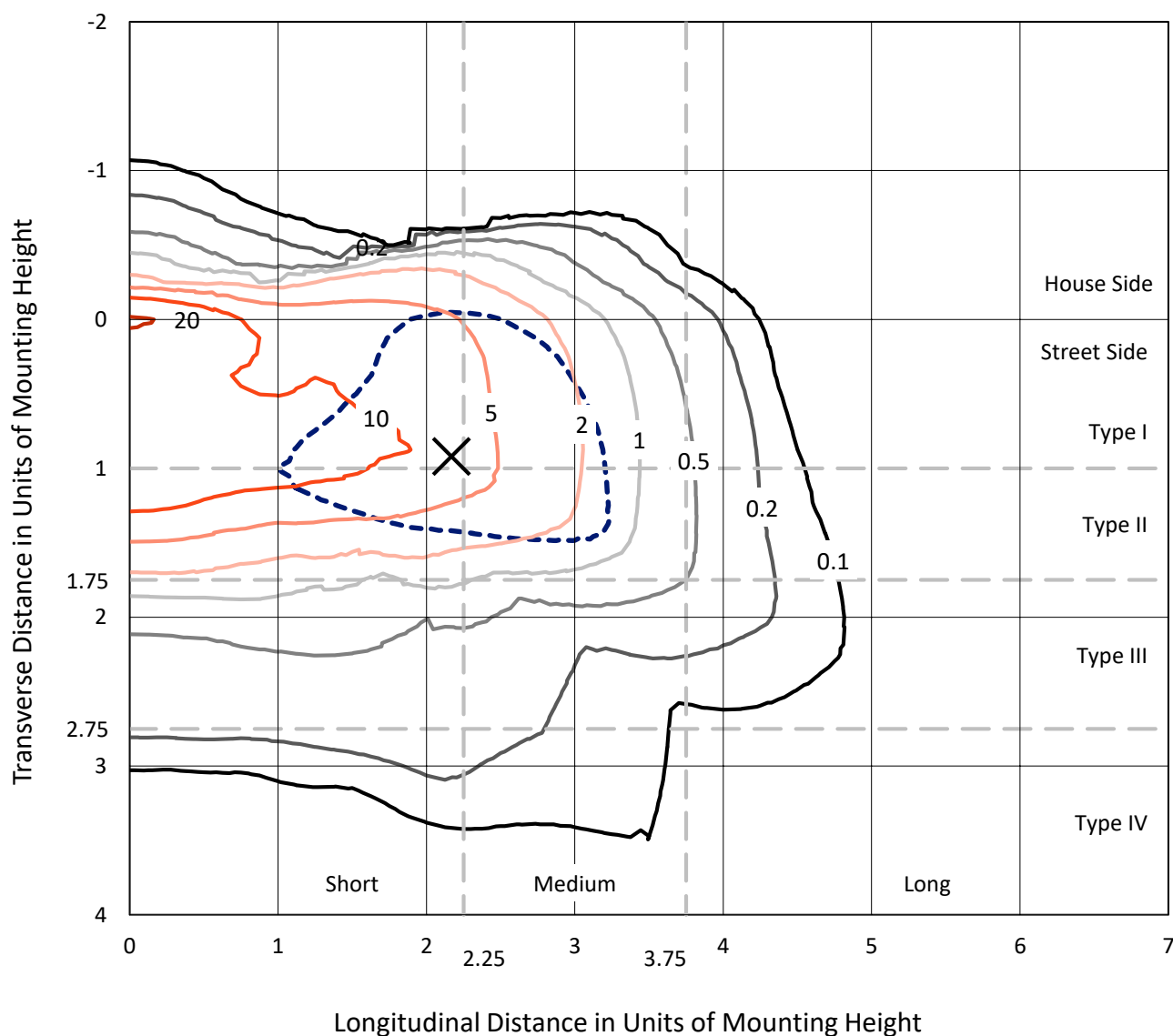
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

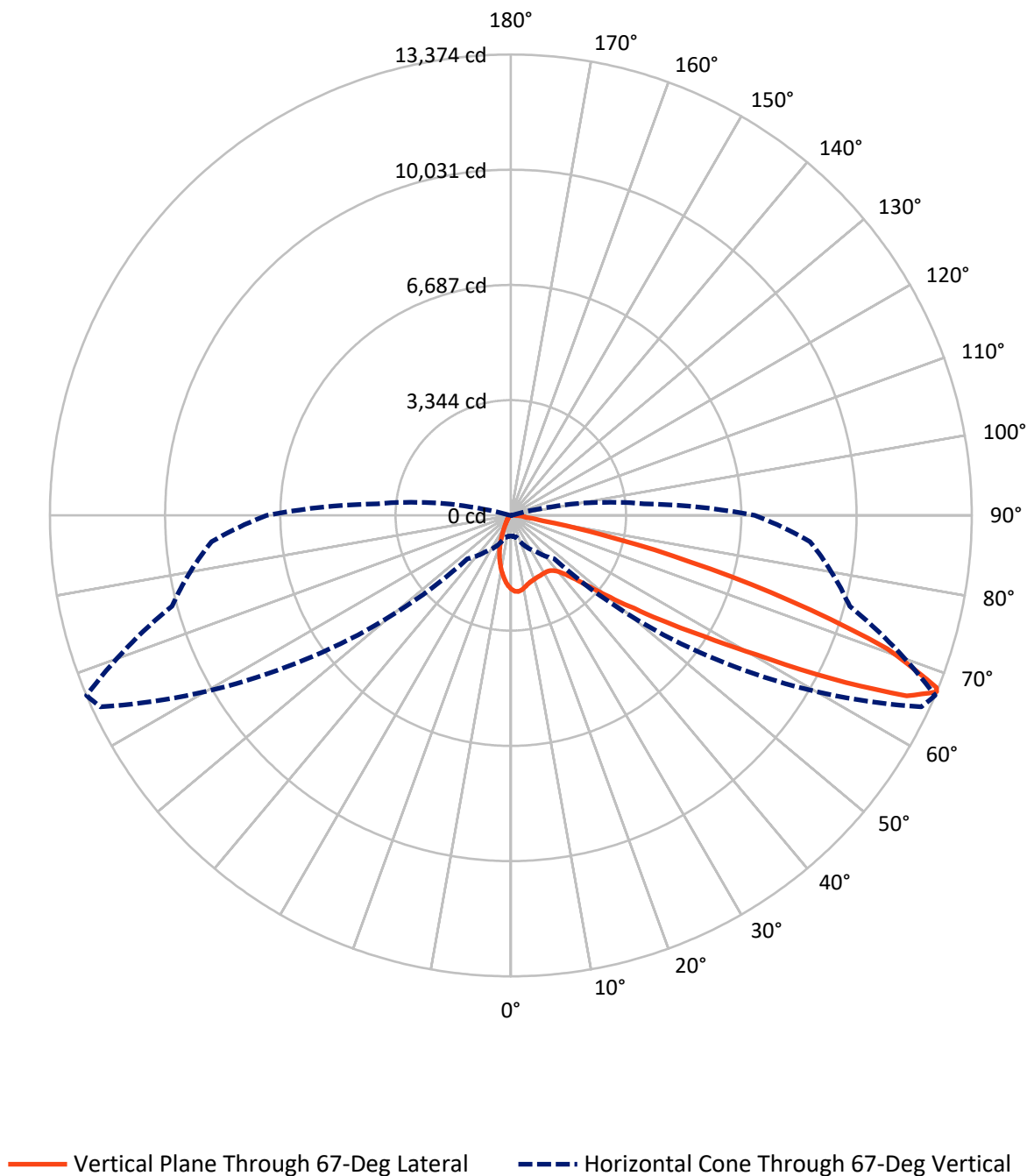


Based on 10 foot mounting height. Maximum calculated value = 21.4 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1008.4	0.0	1008.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	8703.7	0.0	8703.7
	% Fixture	89.6	0.0	89.6
Total	Lumens	9712.1	0.0	9712.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.3	1.8
10°-20°	370.9	3.8
20°-30°	539.3	5.6
30°-40°	841.3	8.7
40°-50°	1490.4	15.3
50°-60°	2358.4	24.3
60°-70°	2701.2	27.8
70°-80°	1120.4	11.5
80°-90°	115.7	1.2
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°	9712.1	100.0
0°-180°	9712.1	100.0

Coefficient of Utilization



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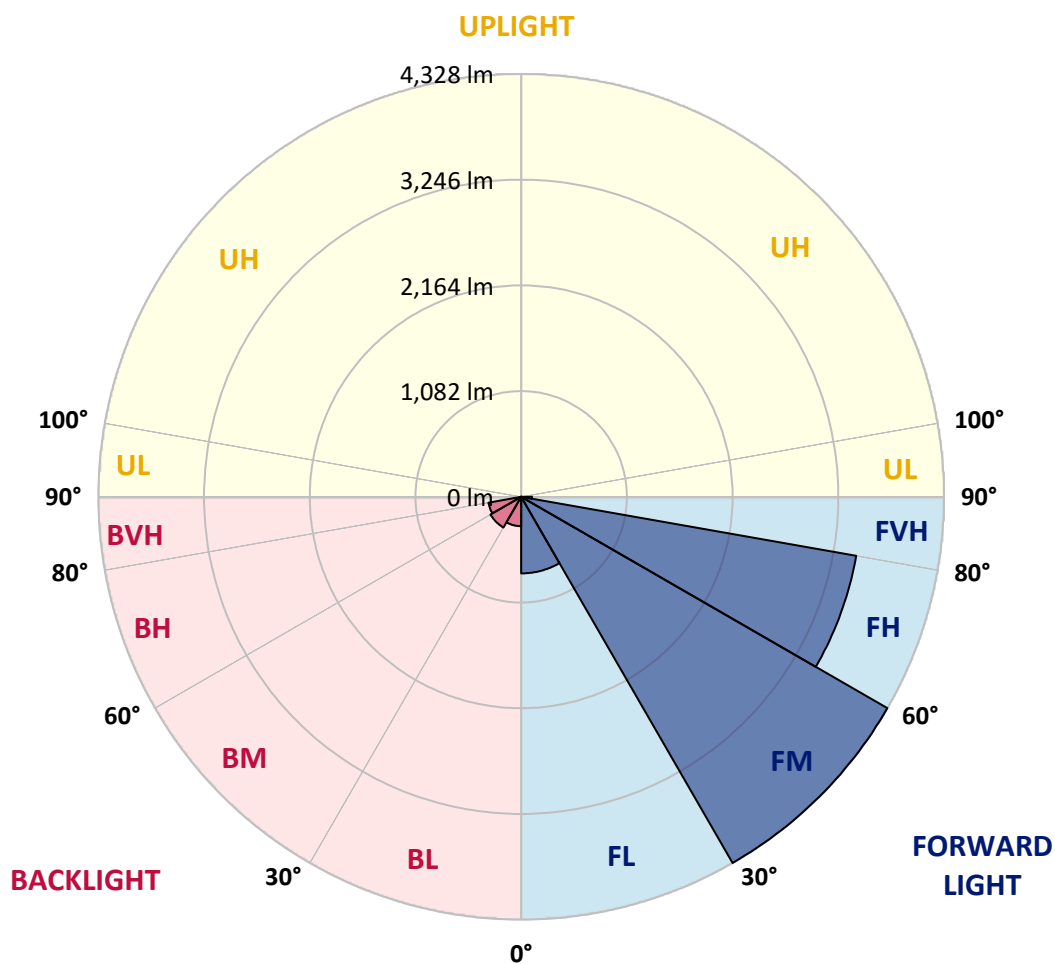
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	783.6	8.1			
FM	(30°-60°)	4327.7	44.6			
FH	(60°-80°)	3481.8	35.9			G2/5000
FVH	(80°-90°)	110.5	1.1			G2/225
BL	(0°-30°)	300.9	3.1	B1/500		
BM	(30°-60°)	362.4	3.7	B1/1000		
BH	(60°-80°)	339.9	3.5	B1/500		G1/500
BVH	(80°-90°)	5.2	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9
2.5°	2214.4	2218.9	2218.3	2221.7	2229.7	2230.2	2222.3	2207.0	2203.6	2183.8	2149.2
5°	2042.2	2055.2	2063.1	2095.4	2131.7	2175.3	2208.1	2220.0	2218.3	2204.2	2152.1
7.5°	1845.6	1858.6	1867.7	1905.6	1953.8	2028.6	2114.1	2184.4	2190.6	2205.9	2149.8
10°	1714.7	1717.0	1729.5	1765.7	1816.1	1892.6	1994.6	2117.5	2136.2	2192.3	2144.1
12.5°	1607.1	1608.8	1625.2	1664.3	1718.1	1795.2	1902.2	2044.4	2073.3	2175.3	2143.0
15°	1530.6	1536.9	1551.6	1592.4	1649.6	1726.1	1836.0	1990.6	2025.2	2169.1	2153.2
17.5°	1505.1	1511.9	1516.5	1545.9	1598.0	1672.8	1785.5	1955.5	1994.6	2172.5	2173.0
20°	1531.8	1536.9	1526.7	1534.0	1566.3	1633.2	1743.1	1925.5	1971.9	2176.4	2198.5
22.5°	1630.9	1633.2	1605.4	1573.1	1567.5	1604.3	1709.6	1901.7	1951.5	2187.2	2228.5
25°	1800.8	1796.9	1751.6	1681.9	1616.2	1599.2	1689.8	1886.9	1941.3	2198.5	2259.7
27.5°	2005.9	2011.6	1949.3	1847.9	1722.7	1633.2	1687.0	1880.7	1936.8	2206.4	2286.9
30°	2255.2	2263.1	2191.7	2064.3	1884.7	1717.0	1713.0	1879.6	1934.0	2201.3	2289.2
32.5°	2509.5	2519.1	2463.1	2331.6	2101.1	1857.5	1772.0	1892.0	1939.6	2183.8	2276.1
35°	2775.8	2789.4	2752.0	2639.2	2394.5	2060.3	1875.6	1930.0	1966.3	2182.1	2263.1
37.5°	3143.4	3155.9	3085.6	2966.1	2749.7	2332.2	2042.2	2001.4	2029.1	2209.3	2266.5
40°	3692.3	3690.6	3509.4	3326.4	3140.0	2677.8	2276.1	2130.5	2144.7	2291.4	2308.4
42.5°	4290.5	4287.7	4019.8	3741.6	3573.4	3103.2	2583.7	2353.7	2344.1	2442.7	2417.2
45°	4751.6	4751.1	4532.4	4219.2	4095.1	3591.5	2981.4	2664.2	2649.4	2688.5	2617.7
47.5°	4948.2	4951.6	4841.7	4621.4	4673.5	4252.0	3482.7	3113.9	3091.9	3076.0	2968.4
50°	4795.3	4802.1	4811.1	4768.1	5097.8	5139.7	4155.1	3747.8	3737.1	3666.3	3498.0
52.5°	4295.6	4330.2	4436.7	4573.2	5245.1	5991.7	5209.4	4535.2	4477.5	4402.1	4216.9
55°	3453.8	3491.8	3694.0	4025.4	5025.8	6551.4	6686.7	5550.4	5454.1	5229.2	4961.8
57.5°	2285.8	2344.7	2638.1	3059.6	4389.1	6641.4	8160.7	6959.2	6623.9	6008.1	5706.7
60°	1259.3	1315.9	1634.3	2016.1	3170.0	6196.2	9152.1	8793.5	8201.0	6878.8	6611.4
62.5°	775.5	806.1	1041.2	1396.4	1901.1	4890.4	9357.1	11098.5	10412.5	7999.8	7704.1
65°	617.5	630.5	745.5	1141.5	1363.0	2908.9	8694.9	12855.7	12626.9	9357.1	8682.5
67°	599.3	604.4	658.8	980.0	1284.8	1783.3	7284.4	13141.8	13374.1	10178.5	8713.0
67.5°	603.3	609.0	660.5	935.3	1282.5	1638.8	6798.3	13029.1	13322.5	10243.7	8577.7
70°	581.8	599.3	756.3	934.7	1219.6	1361.8	4071.3	11288.8	11594.2	9518.0	7278.2
72.5°	206.2	207.3	326.9	756.3	1326.1	1376.5	2044.4	8275.7	8501.8	7281.0	5247.3
75°	122.4	104.2	108.8	215.3	1267.2	1336.9	1179.4	5288.1	5372.5	4172.1	2657.4
77.5°	84.4	73.6	75.9	95.2	482.6	1318.2	937.0	2757.6	2667.6	1463.2	565.9
80°	48.2	42.5	45.3	83.3	175.6	1229.8	883.7	1118.2	953.4	248.1	156.3
82.5°	25.5	21.5	26.1	68.5	122.4	766.4	885.4	540.4	428.3	83.8	106.5
85°	9.1	7.4	12.5	47.0	81.6	235.1	820.8	454.3	356.9	40.8	81.0
87.5°	1.7	1.7	5.1	19.3	32.9	71.9	485.5	269.6	180.7	24.4	55.5
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°	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9
2.5°	2135.1	2110.7	2077.9	2037.6	1990.0	1948.1	1917.0	1884.7	1877.9	1866.6	1864.9
5°	2120.9	2079.0	1997.4	1903.9	1804.2	1714.2	1641.1	1576.0	1547.1	1522.1	1519.3
7.5°	2099.9	2037.1	1898.3	1747.6	1591.8	1450.2	1330.1	1245.1	1167.0	1129.6	1123.9
10°	2075.6	1985.5	1786.7	1577.7	1362.4	1162.4	984.0	834.4	743.8	690.0	683.2
12.5°	2052.9	1935.1	1672.8	1401.5	1115.4	848.0	618.6	475.8	380.7	342.2	337.6
15°	2042.2	1894.3	1566.3	1221.3	857.1	539.9	338.2	261.7	230.6	221.5	220.9
17.5°	2041.0	1859.8	1462.1	1035.0	600.5	313.8	220.4	201.1	194.9	192.6	192.6
20°	2040.5	1826.9	1357.9	841.8	381.2	209.0	183.5	179.0	174.5	171.6	171.6
22.5°	2046.7	1797.4	1249.1	644.7	240.2	169.4	161.4	156.9	151.3	147.3	146.7
25°	2052.9	1774.8	1138.1	458.8	173.9	147.3	139.4	133.1	125.2	120.1	119.5
27.5°	2054.1	1746.5	1019.1	307.0	145.6	128.6	118.4	108.8	99.7	94.6	94.0
30°	2037.1	1698.9	887.1	207.3	128.6	111.6	98.0	87.8	79.3	75.3	75.3
32.5°	2003.6	1640.0	742.1	156.3	114.4	95.7	81.0	71.4	65.7	64.0	63.4
35°	1973.6	1576.5	593.1	132.6	102.5	81.0	66.3	60.0	56.6	56.1	55.5
37.5°	1956.1	1525.5	453.2	120.1	91.2	68.0	56.1	51.5	49.9	48.7	49.3
40°	1969.7	1483.0	334.8	109.9	79.9	56.6	47.6	45.3	43.6	43.1	43.1
42.5°	2029.1	1475.7	248.7	100.8	69.1	47.0	41.4	39.7	38.5	38.0	38.5
45°	2185.5	1521.0	193.2	92.3	58.3	39.7	35.1	34.6	34.0	34.0	34.0
47.5°	2420.6	1614.5	160.9	82.7	48.7	34.0	30.6	30.0	29.5	30.0	30.0
50°	2818.8	1785.5	143.9	73.1	40.2	28.9	26.1	26.1	26.1	26.1	26.6
52.5°	3424.4	2122.0	132.6	63.4	32.9	24.4	22.1	22.1	22.7	22.7	23.2
55°	4099.1	2568.4	122.4	53.8	27.8	20.4	18.1	18.7	19.3	19.8	19.8
57.5°	4831.0	3063.0	113.9	44.2	23.8	16.4	15.3	15.9	16.4	17.6	17.6
60°	5714.1	3598.3	101.4	34.6	19.8	13.0	11.9	13.0	14.7	15.9	16.4
62.5°	6683.9	4116.1	85.5	27.2	16.4	10.2	9.6	11.9	14.2	15.3	15.9
65°	7346.7	4278.6	65.7	22.1	12.5	7.4	7.9	10.8	13.6	15.3	15.3
67°	7078.2	3879.3	53.8	18.7	10.2	5.7	7.4	10.8	13.6	14.7	15.3
67.5°	6891.8	3722.9	51.5	18.1	9.6	5.7	7.4	10.8	13.6	15.3	15.3
70°	5607.6	2796.7	43.1	13.6	7.9	5.1	6.2	10.2	13.0	14.7	14.7
72.5°	3896.3	1724.4	38.5	9.6	6.8	4.5	5.7	9.6	12.5	14.2	14.7
75°	1852.4	624.3	32.9	7.4	6.2	4.0	5.1	9.6	12.5	14.2	14.2
77.5°	377.8	145.0	26.6	6.2	5.1	4.0	4.5	9.1	11.9	13.6	13.6
80°	124.1	56.1	19.8	5.7	5.1	4.0	4.5	8.5	11.9	13.0	13.6
82.5°	89.5	28.3	13.0	5.7	5.1	4.0	4.0	8.5	11.3	13.0	13.0
85°	68.5	19.8	8.5	5.7	5.1	4.0	4.0	7.9	10.8	12.5	12.5
87.5°	45.3	7.9	6.8	5.7	5.1	4.0	4.0	7.9	10.2	11.9	12.5
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)