

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: P299228

Luminaire Tested: **GLNA-AF-03-LED-E1-SL2-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299228
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-SL2-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11304.5 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

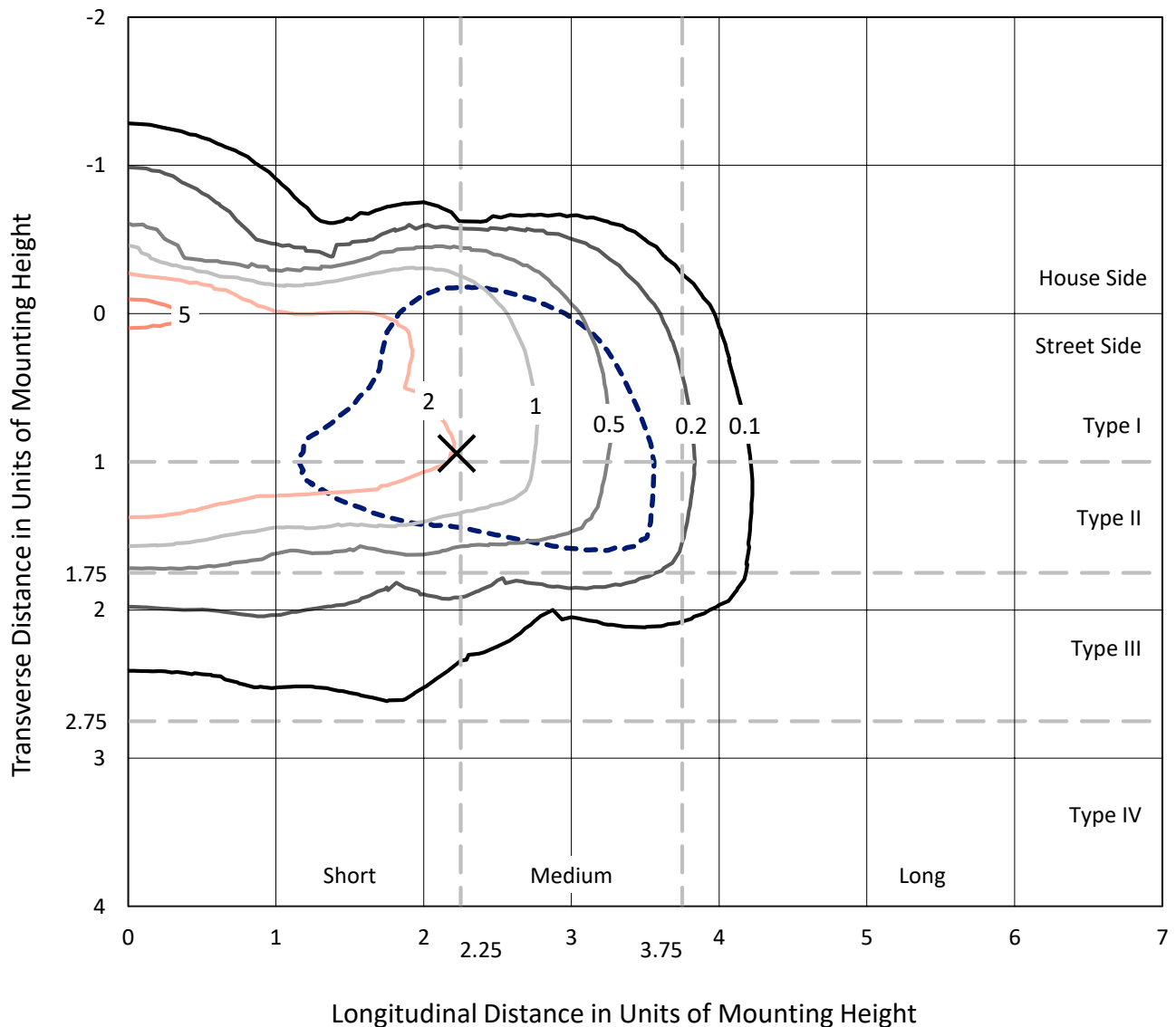
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

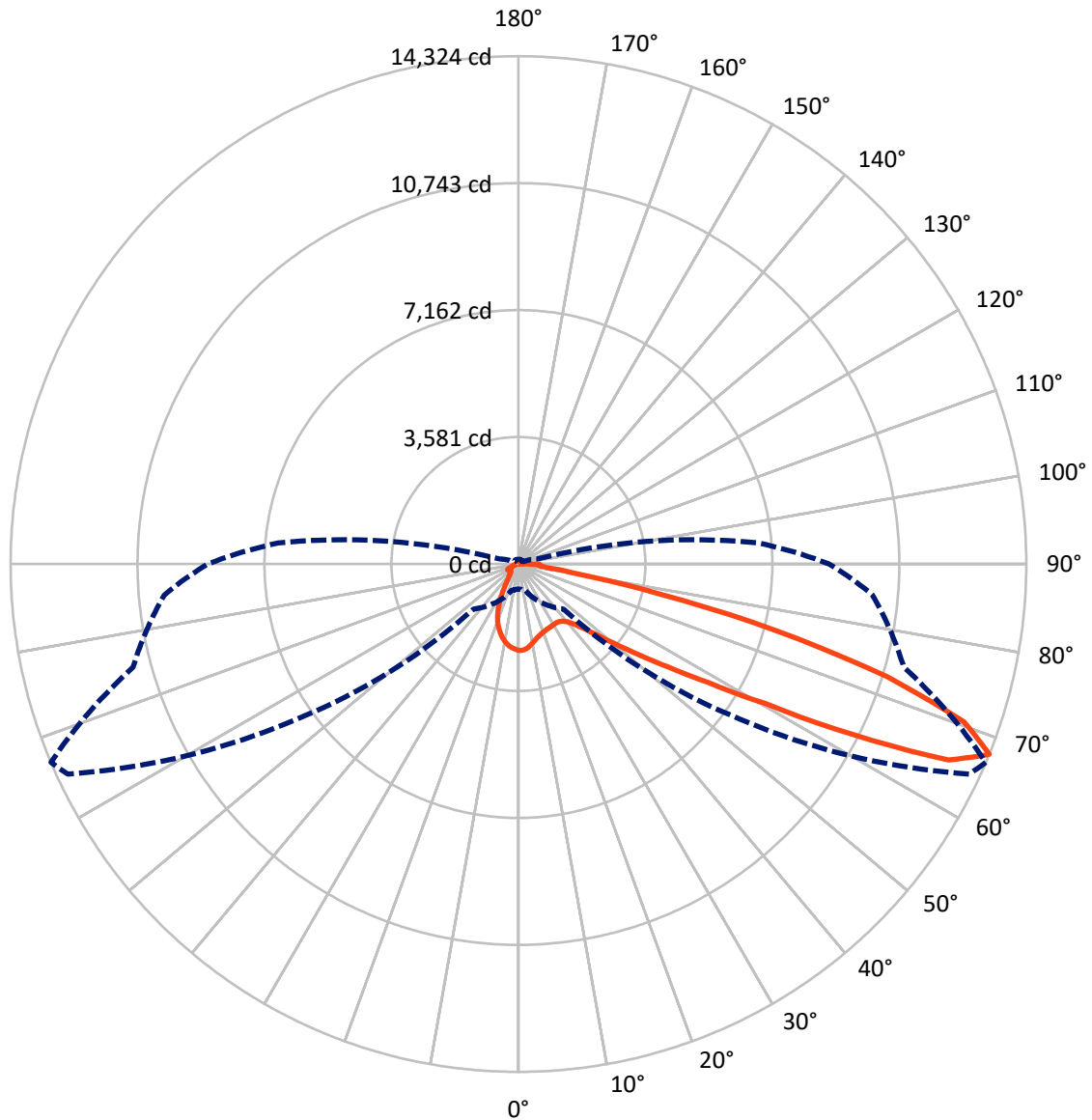
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1873.0	0.0	1873.0
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	9431.4	0.0	9431.4
	% Fixture	83.4	0.0	83.4
Total	Lumens	11304.5	0.0	11304.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.0	1.8
10°-20°	481.3	4.3
20°-30°	652.5	5.8
30°-40°	927.6	8.2
40°-50°	1551.8	13.7
50°-60°	2455.0	21.7
60°-70°	3127.4	27.7
70°-80°	1638.1	14.5
80°-90°	262.7	2.3
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°	11304.5	100.0
0°-180°	11304.5	100.0

Coefficient of Utilization



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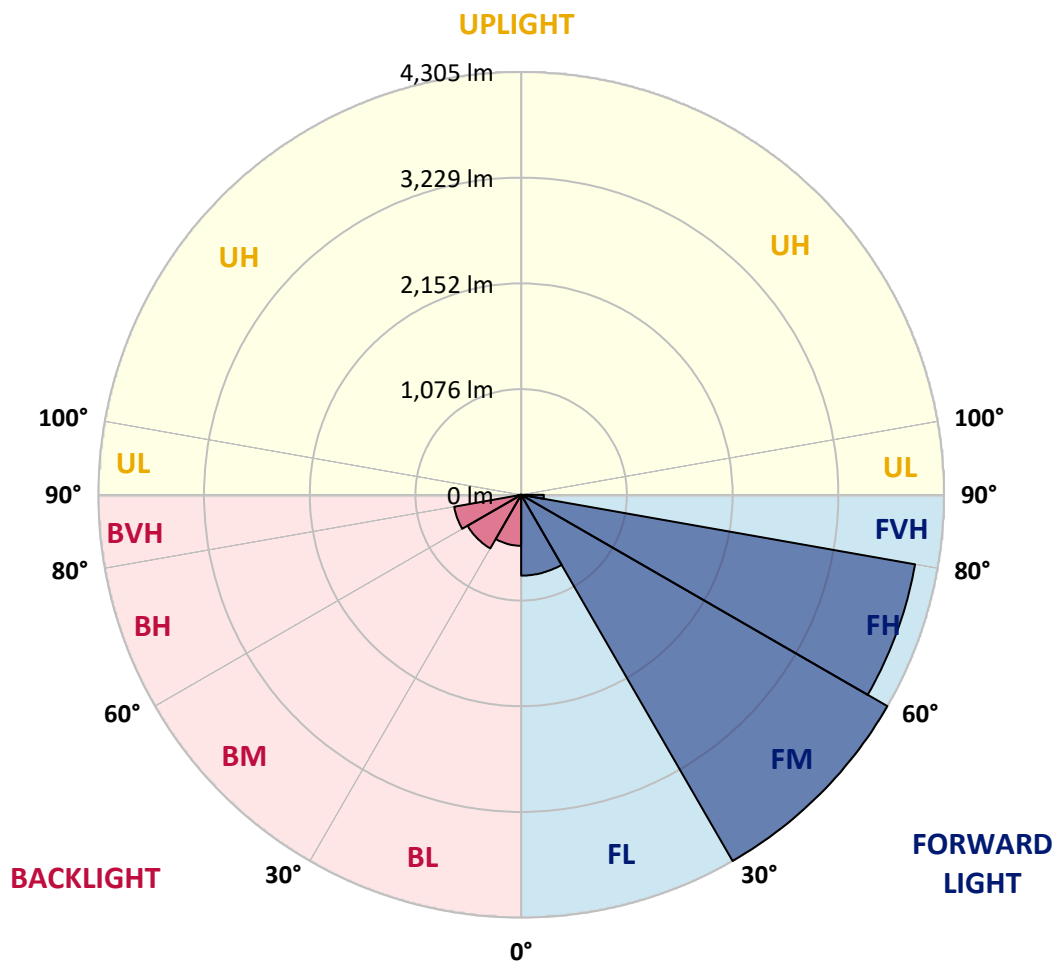
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	822.7	7.3			
FM (30°-60°)	4305.0	38.1			
FH (60°-80°)	4072.8	36.0			G2/5000
FVH (80°-90°)	231.0	2.0			G3/500
BL (0°-30°)	519.1	4.6	B2/1000		
BM (30°-60°)	629.4	5.6	B1/1000		
BH (60°-80°)	692.8	6.1	B2/1000		G2/1000
BVH (80°-90°)	31.7	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3
2.5°	2338.0	2341.9	2354.2	2362.0	2397.1	2412.1	2422.7	2433.3	2435.0	2440.0	2435.0
5°	2092.7	2101.1	2123.9	2149.6	2217.6	2271.1	2327.4	2385.9	2396.5	2434.4	2445.0
7.5°	1902.6	1900.4	1919.3	1950.0	2019.7	2093.8	2192.5	2309.0	2331.9	2417.2	2458.4
10°	1763.8	1762.1	1782.2	1814.0	1880.3	1950.6	2062.1	2221.5	2253.8	2389.8	2471.2
12.5°	1661.2	1661.8	1681.9	1717.0	1784.4	1855.2	1968.4	2136.8	2178.0	2358.1	2484.6
15°	1593.2	1597.7	1613.9	1651.2	1717.0	1787.8	1898.7	2073.2	2119.5	2333.0	2499.7
17.5°	1570.4	1577.6	1583.2	1610.5	1666.8	1737.6	1846.3	2026.4	2075.4	2315.7	2513.0
20°	1591.6	1599.9	1589.3	1598.8	1634.5	1696.9	1805.1	1989.6	2039.8	2296.2	2514.7
22.5°	1682.4	1690.2	1659.0	1631.7	1629.5	1667.4	1771.1	1960.6	2012.4	2281.7	2515.3
25°	1842.4	1847.4	1795.0	1731.5	1669.6	1656.8	1747.1	1940.5	1995.7	2268.9	2504.7
27.5°	2038.6	2042.5	1982.3	1888.7	1764.4	1681.9	1738.7	1928.8	1986.2	2257.7	2486.8
30°	2277.2	2295.6	2214.8	2096.6	1915.4	1756.0	1755.5	1922.7	1975.7	2238.8	2451.7
32.5°	2521.4	2529.2	2473.5	2353.6	2118.9	1886.5	1802.3	1927.2	1972.9	2215.9	2407.1
35°	2768.9	2779.0	2742.7	2646.3	2397.1	2077.7	1893.7	1953.4	1990.1	2208.1	2375.9
37.5°	3089.5	3102.8	3052.7	2941.2	2735.5	2336.9	2045.9	2019.1	2043.1	2230.4	2366.4
40°	3596.2	3590.1	3443.5	3277.3	3105.6	2668.6	2263.3	2130.6	2144.6	2302.3	2395.4
42.5°	4186.0	4170.9	3918.4	3657.5	3512.6	3070.0	2551.0	2324.1	2321.3	2443.9	2497.4
45°	4656.5	4644.2	4416.8	4095.1	3979.2	3527.1	2922.8	2612.3	2591.7	2668.6	2685.9
47.5°	4911.3	4911.8	4780.8	4518.2	4515.5	4108.0	3400.5	3029.3	2993.6	3029.8	3011.4
50°	4822.1	4833.8	4819.8	4736.2	5004.9	4869.4	4024.3	3610.7	3538.8	3574.5	3503.7
52.5°	4390.6	4405.6	4488.1	4616.4	5210.6	5789.8	4940.8	4333.2	4249.5	4236.7	4158.1
55°	3625.7	3644.1	3812.5	4160.9	5039.5	6408.0	6386.9	5254.1	5120.9	4999.9	4966.4
57.5°	2499.1	2529.8	2800.7	3318.0	4485.9	6594.8	8108.9	6566.9	6296.0	5873.4	5881.2
60°	1408.7	1444.4	1763.8	2233.8	3368.8	6391.9	9418.9	8555.4	7983.4	6896.4	6954.4
62.5°	895.8	934.3	1176.8	1552.0	2021.4	5299.3	9955.7	11319.9	10593.5	8157.4	8214.2
65°	725.3	742.0	856.3	1281.1	1467.8	3192.6	9548.2	13597.1	13326.2	9757.9	9492.5
67.5°	708.0	713.6	772.6	1075.3	1407.6	1794.5	7616.1	14023.0	14323.5	11252.4	10024.9
70°	699.6	719.1	870.8	1026.3	1347.9	1513.5	4576.8	12855.7	13330.1	11643.2	9316.3
72.5°	339.5	338.4	438.2	928.2	1518.5	1569.8	2351.4	10401.7	10877.8	10087.3	7655.7
75°	273.7	250.3	239.2	340.1	1460.0	1621.1	1498.5	7157.3	7501.8	6763.2	4706.1
77.5°	259.8	231.9	212.4	213.0	617.1	1719.2	1269.3	3961.3	4061.7	3054.9	1289.4
80°	215.2	189.5	175.6	197.9	298.8	1637.3	1372.5	1792.8	1645.1	750.3	429.2
82.5°	149.4	136.0	132.1	166.1	239.2	1166.8	1596.0	963.3	807.8	375.7	264.8
85°	95.3	81.4	90.3	121.0	186.2	538.5	1644.0	750.9	597.0	238.6	149.4
87.5°	44.0	35.7	44.6	66.9	121.5	185.6	1564.2	843.4	614.9	126.0	94.2
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°	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3	2438.3
2.5°	2439.5	2428.9	2420.5	2404.9	2387.6	2370.9	2355.8	2336.9	2331.3	2326.3	2334.1
5°	2447.3	2436.7	2406.0	2358.1	2305.1	2255.5	2205.9	2163.5	2137.3	2122.8	2131.2
7.5°	2459.0	2443.9	2380.4	2292.3	2197.0	2110.0	2020.2	1948.3	1895.4	1870.3	1877.5
10°	2469.6	2440.6	2336.9	2204.8	2065.4	1936.1	1794.5	1677.4	1590.4	1544.7	1555.9
12.5°	2474.0	2427.8	2276.1	2095.5	1904.3	1714.8	1506.3	1331.2	1206.4	1160.6	1151.2
15°	2478.5	2413.3	2209.2	1971.2	1709.7	1441.6	1149.5	939.9	836.2	813.3	808.3
17.5°	2479.6	2388.2	2133.4	1836.3	1481.7	1116.6	786.0	652.8	653.3	690.1	694.6
20°	2467.9	2350.8	2041.4	1668.5	1208.6	772.1	539.6	516.8	600.9	692.9	704.1
22.5°	2441.1	2301.2	1937.2	1472.8	895.8	508.4	417.5	442.6	551.3	663.9	676.8
25°	2407.1	2241.0	1814.0	1245.9	593.1	363.5	350.1	380.7	454.3	529.6	536.8
27.5°	2360.9	2169.6	1675.7	986.2	385.2	299.4	308.3	328.9	359.0	392.5	395.8
30°	2301.2	2084.4	1528.0	719.1	291.0	269.3	282.1	293.2	306.0	325.0	326.7
32.5°	2232.6	2002.4	1376.4	496.7	258.1	253.6	263.7	269.3	279.3	291.0	292.1
35°	2175.2	1924.4	1219.2	351.2	244.2	241.9	248.6	250.9	260.3	273.2	274.3
37.5°	2142.3	1860.8	1057.0	283.2	234.7	231.3	235.2	235.2	248.6	267.6	270.4
40°	2144.6	1825.7	894.7	255.9	226.9	222.4	223.0	223.0	240.3	260.9	262.6
42.5°	2205.3	1834.6	750.9	245.3	220.8	215.7	213.0	214.6	229.1	242.5	243.6
45°	2348.0	1897.6	616.0	238.6	214.6	213.0	206.8	206.3	211.8	218.0	218.0
47.5°	2582.2	2021.9	524.6	234.1	209.6	209.0	201.8	194.6	194.0	196.2	196.2
50°	2962.9	2236.0	463.3	229.1	206.3	201.8	193.4	182.3	178.4	180.1	180.1
52.5°	3533.8	2617.9	439.8	222.4	199.0	191.8	182.3	171.1	167.8	168.4	168.4
55°	4282.4	3204.3	436.5	214.6	191.2	179.5	171.7	163.3	159.4	160.5	160.5
57.5°	5197.2	4015.4	496.1	202.4	180.6	167.2	162.8	157.2	154.4	156.1	155.5
60°	6309.4	5076.8	735.9	189.5	170.0	156.1	156.1	151.6	149.4	151.1	150.5
62.5°	7590.4	6296.0	1034.7	180.1	158.9	147.2	149.4	147.2	144.9	146.1	145.5
65°	8726.5	7090.4	968.9	172.8	147.7	138.8	142.7	141.6	139.9	141.0	140.5
67.5°	8759.4	6796.0	544.1	165.0	137.1	130.4	136.0	135.5	134.3	135.5	134.9
70°	7817.3	5738.5	306.6	150.5	126.0	120.4	128.2	127.7	126.5	128.8	128.2
72.5°	6263.1	4164.3	224.1	132.7	114.8	109.8	118.7	118.2	118.2	121.5	119.9
75°	3604.0	2142.9	178.9	113.7	103.1	99.2	107.0	107.6	108.7	113.2	109.8
77.5°	1027.4	667.8	146.1	96.4	88.6	87.0	94.8	95.9	96.4	101.5	97.0
80°	381.9	307.7	120.4	80.8	72.5	73.0	80.3	81.9	82.5	87.5	81.9
82.5°	243.6	202.9	97.6	62.4	56.9	56.3	65.2	67.5	67.5	68.0	64.7
85°	142.2	121.5	73.6	45.2	40.1	38.5	48.5	52.4	50.7	49.6	47.4
87.5°	95.3	83.6	45.2	25.1	21.7	20.6	28.4	31.2	30.1	28.4	26.8
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)