

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: P300465

Luminaire Tested: **GLNA-AF-09-LED-E1-T4FT-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300465
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-09-LED-E1-T4FT-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33997.2 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

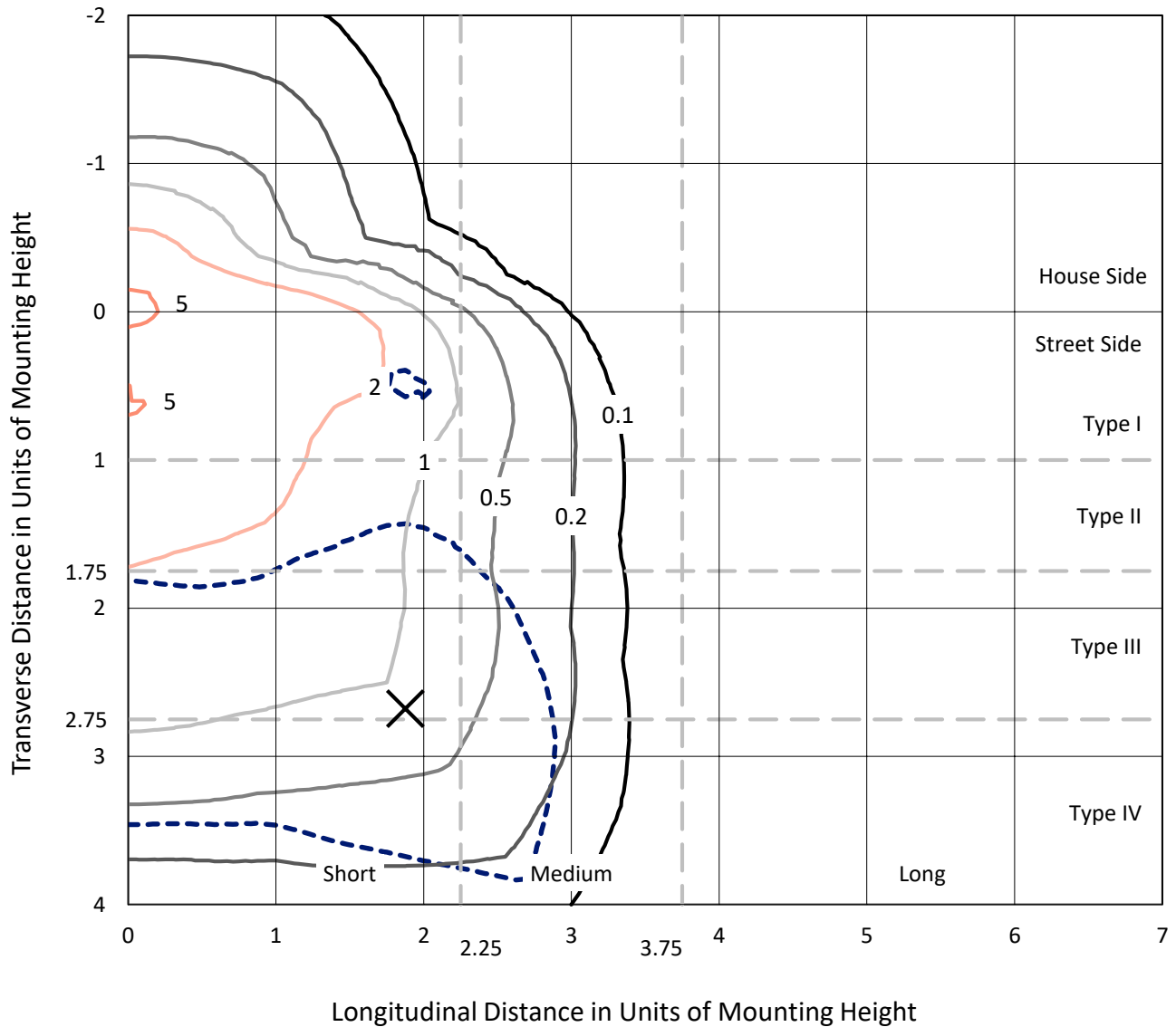
Input Watts (W): 290
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

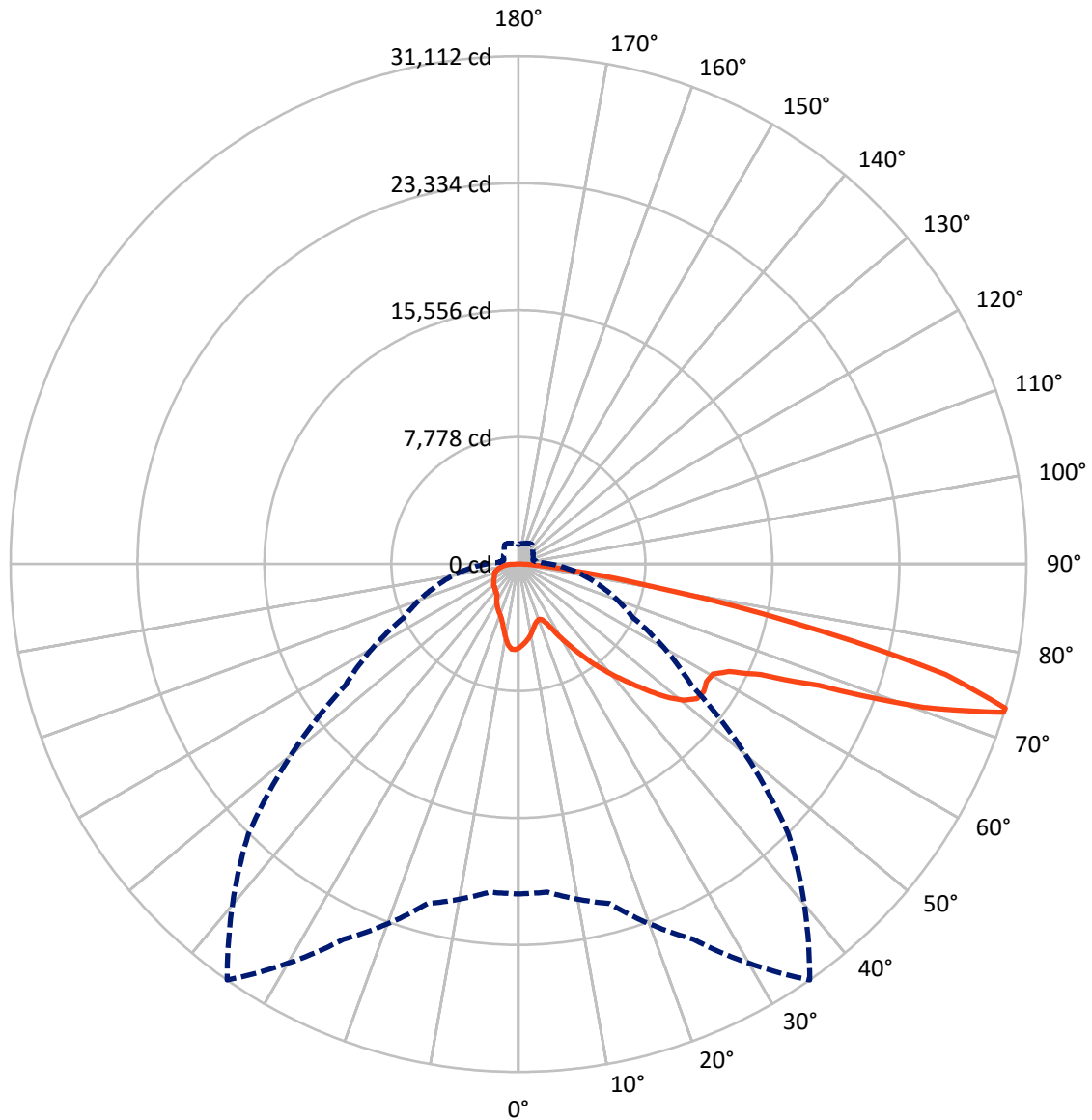
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6484.2	0.0	6484.2
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	27513.0	0.0	27513.0
	% Fixture	80.9	0.0	80.9
Total	Lumens	33997.2	0.0	33997.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	464.5	1.4
10°-20°	1159.4	3.4
20°-30°	1874.3	5.5
30°-40°	3142.9	9.2
40°-50°	4844.7	14.3
50°-60°	6499.7	19.1
60°-70°	8658.9	25.5
70°-80°	6604.1	19.4
80°-90°	748.6	2.2
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°	33997.2	100.0
0°-180°	33997.2	100.0

Coefficient of Utilization



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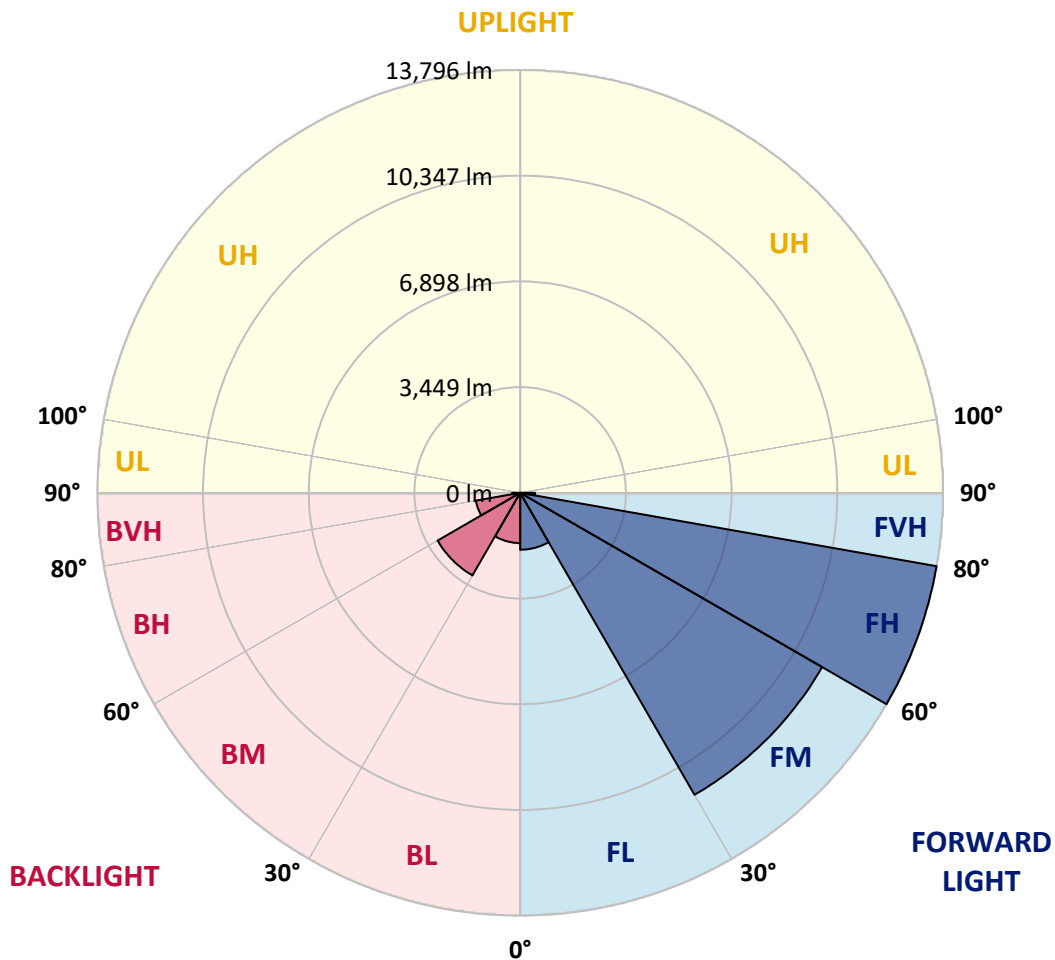
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1857.4	5.5			
FM	(30°-60°)	11375.7	33.5			
FH	(60°-80°)	13796.0	40.6			G5
FVH	(80°-90°)	483.9	1.4			G3/500
BL	(0°-30°)	1640.8	4.8	B3/2500		
BM	(30°-60°)	3111.7	9.2	B3/5000		
BH	(60°-80°)	1467.0	4.3	B3/2500		G3/2500
BVH	(80°-90°)	264.7	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2
2.5°	4928.8	4938.6	4927.2	4941.9	4966.3	4992.5	5010.4	5036.5	5065.9	5106.7	5116.5
5°	4697.0	4711.7	4711.7	4737.8	4785.1	4827.6	4866.8	4909.2	4971.2	5041.4	5069.2
7.5°	4442.3	4450.4	4465.1	4504.3	4572.9	4633.3	4688.8	4757.4	4842.3	4935.3	4984.3
10°	4135.4	4146.8	4169.6	4225.1	4318.2	4401.5	4481.5	4576.2	4683.9	4799.8	4861.9
12.5°	3918.2	3915.0	3924.7	3965.6	4047.2	4148.4	4264.3	4385.1	4517.4	4652.9	4728.0
15°	3844.8	3826.8	3789.2	3779.4	3823.5	3924.7	4058.6	4207.2	4365.5	4528.8	4621.9
17.5°	3890.5	3859.4	3756.6	3681.5	3675.0	3751.7	3893.7	4060.3	4243.1	4442.3	4558.2
20°	4177.8	4104.3	3851.3	3676.6	3616.2	3653.7	3777.8	3954.1	4169.6	4434.1	4582.7
22.5°	4865.1	4757.4	4220.2	3895.4	3691.3	3645.6	3738.6	3926.4	4177.8	4535.3	4724.7
25°	5865.9	5712.4	4853.7	4440.6	4019.4	3776.2	3797.4	3990.1	4293.7	4770.4	4999.0
27.5°	6656.1	6556.5	5681.4	5209.6	4617.0	4128.8	3988.4	4150.0	4530.4	5155.7	5389.2
30°	7126.3	7065.9	6566.3	6081.4	5379.4	4690.4	4354.1	4450.4	4901.0	5689.6	5882.2
32.5°	7671.5	7635.6	7390.7	6945.0	6202.2	5428.4	4933.7	4899.4	5397.3	6331.2	6419.3
35°	8236.4	8225.0	8081.3	7761.3	7085.4	6401.4	5702.6	5470.8	5937.7	6997.3	6941.8
37.5°	8762.1	8742.5	8659.3	8473.1	8009.5	7446.2	6486.3	6056.9	6520.6	7634.0	7387.5
40°	9730.2	9576.8	9291.1	9150.7	8943.3	8326.2	7108.3	6603.8	7124.6	8241.3	7772.8
42.5°	10910.6	10660.8	10128.6	9935.9	9906.6	9020.1	7532.8	7134.4	7733.6	8843.7	8151.5
45°	11839.5	11604.5	11145.7	10902.4	11010.2	9648.6	7958.9	7700.9	8360.5	9475.6	8541.7
47.5°	12830.5	12461.6	11854.2	11927.7	12162.8	10242.9	8393.1	8309.9	9047.8	10182.5	9026.6
50°	12866.4	12584.0	12317.9	12757.1	13122.8	10789.8	8936.8	8948.2	9888.6	11072.2	9671.5
52.5°	12120.4	12059.9	12482.8	13173.4	13700.7	11222.4	9555.6	9607.8	10964.5	12094.2	10380.0
55°	11859.1	11790.6	12278.7	13028.1	13779.1	11580.0	10226.5	10321.2	12265.7	13171.7	11070.6
57.5°	12495.8	12344.0	12376.7	12959.5	13588.1	11971.8	10957.9	11149.0	13679.5	14113.7	11514.7
60°	14275.4	13950.5	13333.4	13318.7	13690.9	12559.5	11803.6	12037.1	15148.8	14564.3	11341.6
62.5°	16771.6	16446.7	15290.8	14538.2	14482.7	13529.3	12842.0	12904.0	15997.8	13953.8	10285.3
65°	19473.5	19182.9	17891.6	16828.7	16316.1	15135.7	14048.4	13290.9	15720.2	12273.8	8437.2
67.5°	22753.4	22441.6	21331.4	20350.2	19857.2	17728.3	14895.8	12920.3	13958.6	9508.2	6065.1
70°	25047.2	24728.8	24291.3	25086.4	26292.9	21468.6	15005.1	11413.4	10425.7	6319.8	3650.5
72.5°	22054.7	21906.1	22704.4	26052.9	31078.0	23737.9	13563.6	8309.9	6055.3	3355.0	2112.6
73°	20206.6	20173.9	21535.5	25375.4	31112.3	23388.5	12931.8	7723.8	5193.3	2968.0	1931.4
75°	9124.5	9387.4	12371.8	19382.1	27030.8	19272.7	9101.7	4430.9	2933.8	2050.5	1457.9
77.5°	2192.6	2284.0	3870.9	9204.5	17070.4	11485.3	4123.9	2190.9	1875.8	1448.1	1064.4
80°	933.8	964.9	1490.6	3400.7	8037.2	4625.1	1900.3	1467.7	1297.9	1010.6	746.1
82.5°	519.2	551.8	845.7	1542.8	3244.0	1577.1	1159.1	1022.0	853.8	609.0	484.9
85°	293.9	311.8	494.7	862.0	1374.6	633.4	693.9	679.2	481.6	313.5	238.4
87.5°	138.8	150.2	238.4	400.0	538.8	248.2	352.6	388.6	302.0	191.0	124.1
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2	5131.2
2.5°	5128.0	5157.4	5191.6	5209.6	5225.9	5245.5	5265.1	5265.1	5268.4	5270.0
5°	5092.1	5152.5	5206.3	5229.2	5234.1	5234.1	5229.2	5203.1	5180.2	5190.0
7.5°	5017.0	5105.1	5150.8	5142.7	5080.6	5008.8	4948.4	4874.9	4837.4	4830.8
10°	4909.2	5010.4	5018.6	4937.0	4783.5	4630.0	4502.7	4378.6	4319.8	4305.1
12.5°	4790.0	4883.1	4830.8	4662.7	4416.2	4192.5	4030.9	3905.2	3849.6	3835.0
15°	4693.7	4757.4	4625.1	4360.6	4050.5	3813.7	3679.9	3586.8	3547.6	3536.2
17.5°	4643.1	4656.1	4414.5	4057.0	3727.2	3529.7	3446.4	3402.3	3387.6	3379.5
20°	4667.6	4576.2	4213.7	3774.5	3462.7	3324.0	3304.4	3292.9	3289.7	3284.8
22.5°	4790.0	4551.7	4029.2	3506.8	3230.9	3170.5	3186.8	3185.2	3181.9	3178.7
25°	5008.8	4572.9	3849.6	3252.1	3036.6	3023.6	3052.9	3052.9	3039.9	3039.9
27.5°	5297.8	4617.0	3648.8	3010.5	2860.3	2861.9	2884.8	2878.3	2863.6	2853.8
30°	5650.4	4644.7	3413.7	2793.4	2695.4	2688.9	2695.4	2667.7	2623.6	2620.3
32.5°	6011.2	4610.4	3141.1	2600.7	2520.7	2506.0	2501.1	2461.9	2411.3	2396.6
35°	6337.7	4484.7	2863.6	2447.3	2354.2	2321.5	2344.4	2331.3	2285.6	2274.2
37.5°	6576.1	4251.3	2613.8	2311.7	2235.0	2226.9	2241.5	2246.4	2192.6	2181.1
40°	6736.1	3934.5	2399.9	2197.5	2212.2	2181.1	2132.2	2097.9	2081.6	2076.7
42.5°	6865.0	3604.8	2220.3	2143.6	2217.1	2127.3	2021.1	1965.6	1995.0	2008.1
45°	7013.6	3283.1	2070.1	2076.7	2192.6	2065.2	1944.4	1890.5	1902.0	1905.2
47.5°	7217.7	2891.3	1908.5	1968.9	2110.9	2022.8	1897.1	1820.3	1766.5	1742.0
50°	7500.1	2427.7	1740.3	1848.1	2030.9	1991.8	1823.6	1742.0	1642.4	1619.5
52.5°	7696.0	1995.0	1601.6	1746.9	1959.1	1929.7	1764.8	1658.7	1554.2	1534.6
55°	7589.9	1657.1	1480.8	1634.2	1864.4	1853.0	1715.9	1573.8	1492.2	1475.9
57.5°	7059.3	1443.2	1387.7	1528.1	1748.5	1787.7	1650.5	1502.0	1443.2	1431.8
60°	6047.1	1309.3	1328.9	1456.3	1653.8	1722.4	1585.2	1462.8	1423.6	1415.5
62.5°	4692.1	1219.5	1284.8	1404.0	1580.3	1676.7	1549.3	1457.9	1443.2	1433.4
65°	3361.5	1147.7	1237.5	1351.8	1513.4	1634.2	1536.3	1451.4	1454.6	1446.5
67.5°	2284.0	1084.0	1180.4	1293.0	1448.1	1596.7	1518.3	1428.5	1469.3	1459.5
70°	1598.3	1022.0	1113.4	1217.9	1366.5	1544.4	1485.7	1394.2	1391.0	1351.8
72.5°	1247.3	940.4	1022.0	1113.4	1262.0	1471.0	1420.4	1317.5	1263.6	1222.8
73°	1190.2	920.8	999.1	1090.6	1239.1	1453.0	1402.4	1296.3	1235.9	1198.3
75°	984.5	835.9	907.7	989.3	1141.2	1368.1	1314.2	1200.0	1123.2	1100.4
77.5°	773.8	715.1	783.6	857.1	1005.7	1244.0	1183.6	1074.2	1031.8	1012.2
80°	573.0	592.6	653.0	718.3	871.8	1111.8	1057.9	948.5	1137.9	1090.6
82.5°	403.2	449.0	504.5	563.2	731.4	982.8	917.5	804.9	832.6	692.2
85°	238.4	293.9	346.1	396.7	527.3	814.7	757.5	641.6	525.7	501.2
87.5°	138.8	163.3	178.0	230.2	362.4	613.9	533.9	475.1	272.6	184.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)