

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: P300658

Luminaire Tested: **GLNA-AF-10-LED-E1-AFL-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300658
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-AFL-7050-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 5000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND
Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43816 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 558
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

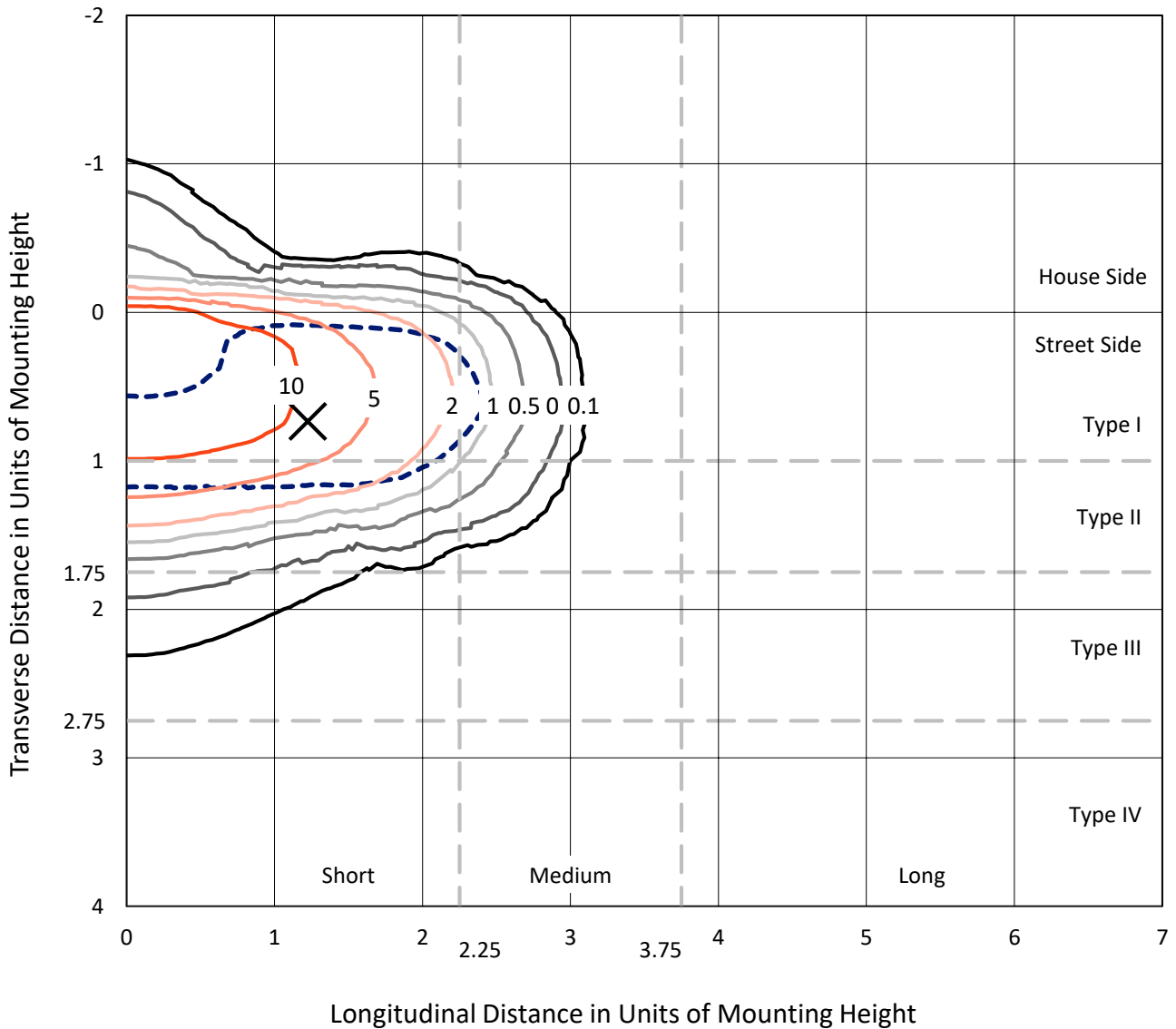


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Iso-Footcandle Lines of Horizontal Illumination

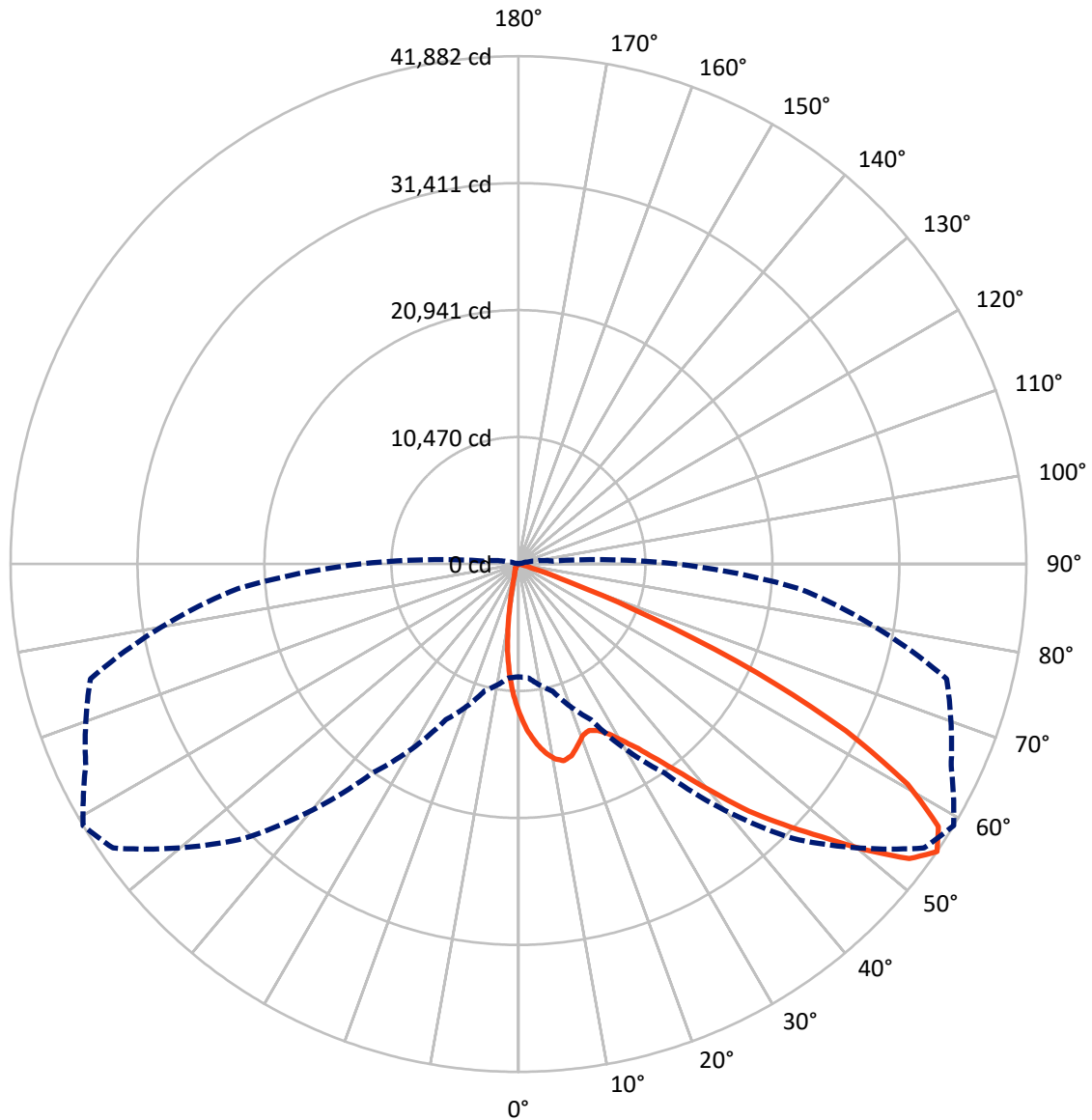
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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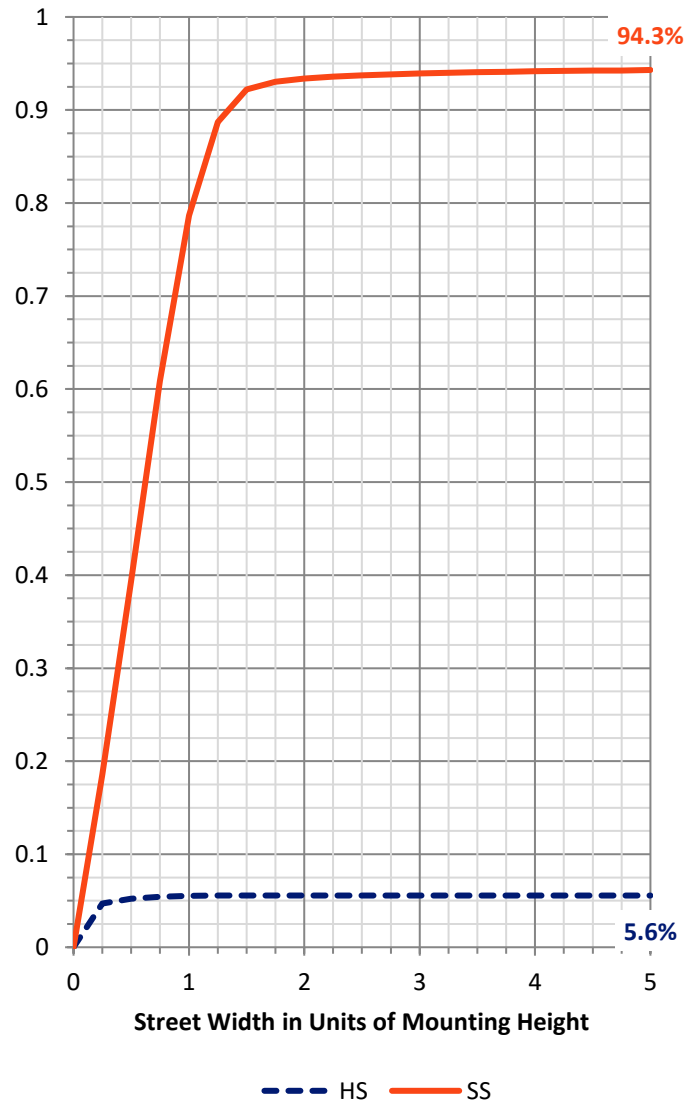
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2447.4	0.0	2447.4
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	41368.7	0.0	41368.7
	% Fixture	94.4	0.0	94.4
Total	Lumens	43816.0	0.0	43816.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1033.1	2.4
10°-20°	2473.5	5.6
20°-30°	4209.0	9.6
30°-40°	7238.6	16.5
40°-50°	11175.6	25.5
50°-60°	11235.1	25.6
60°-70°	5761.4	13.1
70°-80°	624.4	1.4
80°-90°	65.3	0.1
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°	43816.0	100.0
0°-180°	43816.0	100.0



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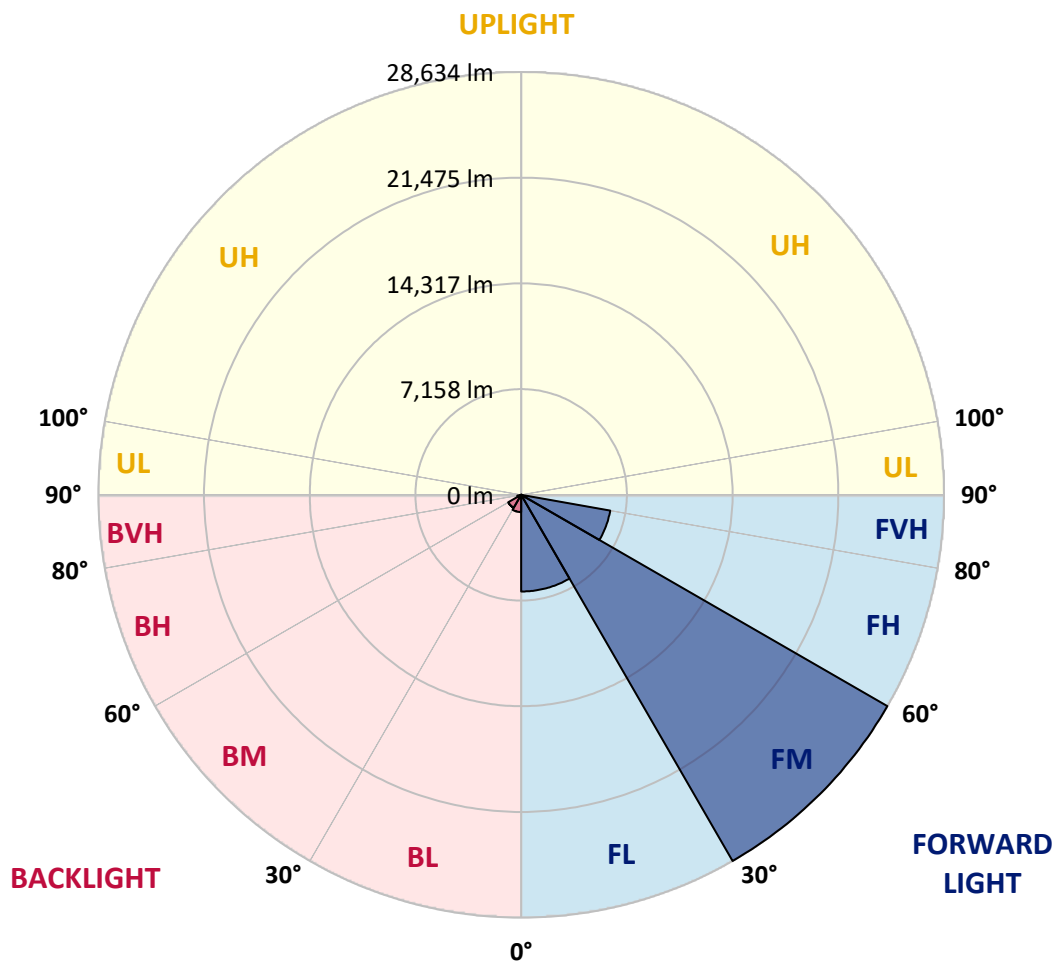
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6547.6	14.9			
FM	(30°-60°)	28633.6	65.3			
FH	(60°-80°)	6123.6	14.0			G3/7500
FVH	(80°-90°)	63.9	0.1			G1/100
BL	(0°-30°)	1168.1	2.7	B3/2500		
BM	(30°-60°)	1015.7	2.3	B2/2500		
BH	(60°-80°)	262.2	0.6	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1
2.5°	14594.0	14438.9	14392.3	14361.3	14219.1	14040.7	13797.6	13683.8	13451.1	13076.2	12615.9
5°	15930.8	15902.4	15799.0	15742.1	15589.5	15336.1	14948.3	14762.1	14392.3	13761.4	12936.5
7.5°	15346.5	15524.9	15667.1	15905.0	16204.9	16194.6	15868.8	15674.9	15261.1	14428.5	13293.4
10°	13089.1	13233.9	13466.6	14007.0	15108.6	16080.8	16463.5	16323.9	15992.9	15041.3	13637.3
12.5°	12646.9	12631.4	12672.8	12830.5	13407.1	14793.1	16362.7	16644.5	16577.3	15602.5	13963.1
15°	12882.2	12864.1	12859.0	12913.3	13052.9	13637.3	15605.0	16414.4	16934.1	16122.2	14239.8
17.5°	13541.6	13464.0	13422.7	13378.7	13337.3	13482.1	14694.9	15770.5	16988.4	16577.3	14469.9
20°	14671.6	14542.3	14389.7	14141.5	13908.8	13836.4	14312.2	15108.6	16794.5	16923.8	14619.9
22.5°	16091.2	15925.7	15661.9	15209.4	14736.2	14462.1	14500.9	14899.1	16504.9	17301.3	14689.7
25°	17686.6	17474.5	17122.9	16494.5	15799.0	15312.9	15059.4	15199.1	16373.0	17743.5	14769.8
27.5°	19395.8	19160.5	18700.2	17844.3	17055.7	16398.9	15881.7	15863.6	16598.0	18322.7	14899.1
30°	21089.4	21053.2	20453.3	19548.3	18503.7	17704.7	16960.0	16864.3	17226.3	19124.3	15155.1
32.5°	23349.4	23077.9	22343.5	21412.7	20207.7	19248.4	18366.6	18144.3	18190.8	20057.7	15550.7
35°	26198.9	25901.5	24867.2	23582.1	22234.9	21102.4	20127.5	19825.0	19711.2	21585.9	16217.9
37.5°	28039.9	28034.8	27385.7	26077.4	24631.9	23383.0	22322.8	21968.6	21738.5	23432.1	17252.2
40°	28089.1	28210.6	28295.9	28283.0	27253.9	26103.2	25162.0	24725.0	24189.8	25898.9	18589.0
42.5°	26581.6	26894.5	27646.9	28924.3	29534.5	29076.8	28283.0	27853.8	27057.4	28539.0	20218.0
45°	24544.0	24761.2	26077.4	28430.4	30770.5	32024.6	31419.5	30651.6	29601.7	31292.8	21679.0
47.5°	23631.2	23670.0	24520.7	27103.9	30863.6	34439.7	34806.9	33557.9	31913.4	33511.4	22821.9
50°	20903.3	20973.1	22147.0	24805.2	29772.4	35580.0	38209.7	37025.4	34434.5	35220.6	23238.2
52.5°	15755.0	15853.3	17342.7	21027.4	26772.9	35093.9	40645.5	40358.5	37196.1	36055.8	23261.5
55°	9295.8	9425.1	10847.2	14154.4	21058.4	32001.3	40826.5	41881.5	39375.9	36549.7	23225.3
57.5°	4341.5	4432.0	5246.5	7291.8	13096.9	25291.3	38101.1	40836.9	40578.3	36810.8	23481.3
60°	2306.5	2332.4	2528.9	3157.2	5918.8	16036.9	32782.2	36875.5	39481.9	37172.8	23794.1
62.5°	1763.5	1771.2	1760.9	1835.9	2487.5	7118.6	24779.3	30315.4	35068.0	36901.3	23447.6
65°	1528.2	1541.1	1468.7	1450.6	1595.4	2539.2	14720.7	21609.2	27556.4	33237.3	21086.8
67.5°	1370.5	1375.6	1287.7	1212.7	1238.6	1373.0	5807.6	11829.8	18239.9	24363.0	15284.4
70°	1261.8	1256.7	1161.0	1042.1	1008.4	938.6	1846.2	4336.3	8716.6	12354.7	7108.2
72.5°	1117.0	1119.6	1073.1	917.9	837.8	656.8	855.9	1264.4	2601.3	3366.7	1665.2
75°	990.3	977.4	920.5	822.3	690.4	431.8	424.1	563.7	801.6	796.4	359.4
77.5°	716.3	703.3	721.4	674.9	530.1	279.3	212.0	271.5	325.8	315.5	100.8
80°	524.9	517.2	465.4	561.1	468.0	191.3	131.9	144.8	168.1	142.2	31.0
82.5°	359.4	356.8	328.4	310.3	266.3	116.4	82.7	90.5	108.6	80.2	15.5
85°	56.9	64.6	237.9	188.8	157.7	51.7	56.9	62.1	72.4	44.0	5.2
87.5°	0.0	0.0	111.2	98.3	31.0	20.7	33.6	36.2	36.2	23.3	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1	12334.1
2.5°	12380.6	12122.0	11643.7	11149.8	10692.1	10146.5	9771.6	9489.7	9163.9	9076.0	9267.4
5°	12465.9	11977.2	10948.1	9828.5	8776.1	7609.9	6717.8	6011.9	5373.2	5156.0	5352.5
7.5°	12600.4	11873.8	10195.6	8352.0	6521.3	4700.9	3454.6	2634.9	2112.6	1957.4	2040.2
10°	12734.9	11723.8	9324.2	6604.0	4101.0	2288.4	1489.4	1189.4	1078.3	1055.0	1067.9
12.5°	12846.0	11522.1	8261.5	4695.7	2192.7	1225.6	974.8	925.7	910.2	910.2	915.4
15°	12913.3	11217.0	7002.2	2986.5	1261.8	925.7	850.7	835.2	835.2	837.8	843.0
17.5°	12905.5	10829.1	5624.0	1807.4	943.8	819.7	775.7	762.8	760.2	765.4	768.0
20°	12809.8	10322.3	4240.6	1192.0	822.3	747.3	703.3	680.1	677.5	682.6	687.8
22.5°	12628.8	9696.6	3033.1	917.9	742.1	677.5	623.2	602.5	602.5	607.7	612.8
25°	12409.0	8931.2	2073.8	778.3	669.7	602.5	550.8	532.7	537.8	550.8	553.4
27.5°	12135.0	8070.1	1409.2	667.1	581.8	527.5	488.7	475.8	488.7	506.8	512.0
30°	11899.7	7172.9	1005.9	576.6	493.9	455.1	431.8	431.8	449.9	483.5	491.3
32.5°	11718.6	6304.1	775.7	509.4	429.2	395.6	382.7	395.6	424.1	457.7	465.4
35°	11695.4	5587.8	656.8	455.1	382.7	349.1	343.9	367.2	395.6	421.5	426.6
37.5°	11873.8	4925.9	592.1	411.1	341.3	310.3	305.1	333.6	362.0	393.0	400.8
40°	12212.5	4406.1	545.6	369.8	307.7	274.1	263.7	284.4	323.2	364.6	374.9
42.5°	12652.1	3976.9	493.9	328.4	274.1	227.5	214.6	237.9	279.3	323.2	336.1
45°	13071.0	3607.1	437.0	281.8	230.1	175.8	170.7	201.7	222.4	266.3	276.7
47.5°	13301.1	3281.3	387.9	230.1	178.4	142.2	142.2	150.0	170.7	222.4	232.7
50°	13223.6	3020.2	336.1	170.7	124.1	108.6	108.6	106.0	137.0	178.4	186.2
52.5°	13068.4	2870.2	289.6	131.9	85.3	77.6	69.8	77.6	95.7	113.8	116.4
55°	13045.1	2844.3	243.1	106.0	59.5	51.7	38.8	38.8	38.8	36.2	31.0
57.5°	13226.1	2885.7	204.3	85.3	44.0	33.6	20.7	0.0	0.0	0.0	0.0
60°	13412.3	2929.7	175.8	59.5	31.0	18.1	2.6	0.0	0.0	0.0	0.0
62.5°	13102.0	2831.4	147.4	36.2	23.3	7.8	0.0	0.0	0.0	0.0	0.0
65°	11509.2	2409.9	116.4	25.9	15.5	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	8186.5	1613.5	77.6	15.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0
70°	3736.4	674.9	49.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	799.0	209.4	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	162.9	152.6	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	51.7	240.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	31.0	173.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.2	25.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)