Design Project = RSL Rover **System=** Lidar Configuration

	TARGET or	DESIGN IDEAS																			
CRITERIA	**FACTOR**	**1 = Baseline**		**Case B: 6 Cameras**		**Case C: 2 Cameras**		**0**		**0**		**0**		**0**		**0**		**0**		**0**	
Time – Design	1	1		1		1															
Time – Build	1	1		1		1															
Time – Test	1	1		1		1															
Time Score	10		10		10.00		10.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Cost – Prototype	1	$ 1.00		$ 1.00		$ 1.00															
Cost – Production	1	$ 1.00		$ 1.00		$ 1.00															
Cost Score	10		10		10.00		10.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Implementation Time	3.5	3	10.5	4	14	4	14	5			0		0		0		0		0		0
Forward FOV	9	3	27	3	27	3	27	3			0		0		0		0		0		0
Reverse FOV	3.5	3	10.5	3	10.5	3	10.5	3			0		0		0		0		0		0
Side FOV	7.5	3	22.5	4	30	3	22.5	4			0		0		0		0		0		0
Blind Spots	7	3	21	2	14	3	21	2			0		0		0		0		0		0
Weight	0	3	0	3	0	3	0	3			0		0		0		0		0		0
Material Cost	4.5	3	13.5	4	18	3	13.5	4			0		0		0		0		0		0
Perspective Height	5	3	15	4	20	3	15	4			0		0		0		0		0		0
Vertical Clearance	1	3	3	3	3	3	3	3			0		0		0		0		0		0
Electrical Power	7.5	3	22.5	3	22.5	3	22.5	3			0		0		0		0		0		0
Robustness	6.5	3	19.5	4	26	3	19.5	4			0		0		0		0		0		0
0	11	3	33		0		0				0		0		0		0		0		0
	TOTAL		198.0		185.0		168.5		20.0		20.0		20.0		20.0		20.0		20.0		20.0
	RANK																				
	% MAX		100.0%		93.4%		85.1%		10.1%		10.1%		10.1%		10.1%		10.1%		10.1%		10.1%
	MAX	**198.0**																			

NOTE: User fills in Purple areas, gold areas are calculated or fixed
Light blue areas filled from prioritizing matrix

BASELINE = Case A: 4 Cameras mounted on roll-cage

Design Idea Descriptions

2. Case B: 6 Cameras mounted on roll cage
3. Case C: 2 Cameras on roll cage and 2 on hood
4.
5.
6.
7.
8.
9.
10.

Timescore(i)=Timescore(B)*(TD(i)/TD(B) + TB(i)/TB(B) + TT(i)/TT(B))/3
Costscore(i)=Costscore(B)*(Cprot(i)/Cprot(B) + Cprod(i)/Cprot(B))/2
Total(i) = SUM(Factor(j)*Comparison(i,j)) + (Timescore(B)-Timescore(i)) + (Costscore(B) - Costscore(i))

Comparison(i,j) = 5 if idea "i" is much better than baseline for criteria "j"
Comparison(i,j) = 4 if idea "i" is better than baseline for criteria "j"
Comparison(i,j) = 3 if idea "i" is same as baseline for criteria "j"
Comparison(i,j) = 2 if idea "i" is worse than baseline for criteria "j"
Comparison(i,j) = 1 if idea "i" is much worse than baseline for criteria "j"